BRITISH ZOOLOGY.

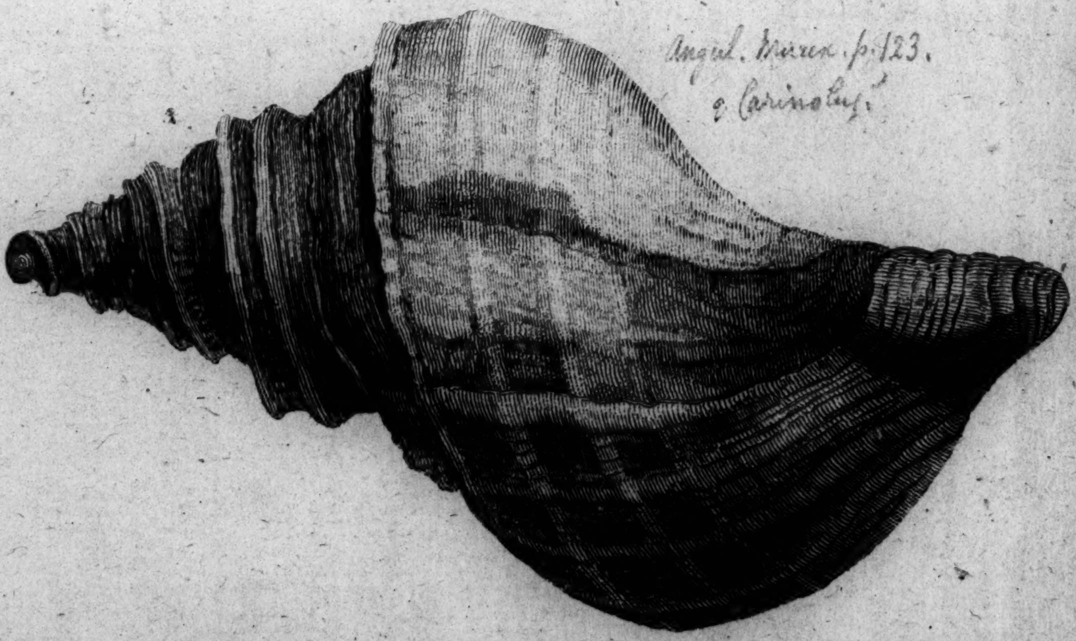
VOL. IV.

CRUSTACEA. MOLLUSCA.

TESTACEA.

EX DONO FR. DOUCE.
BIBL. BODL.

O MARE, O LITTUS, verum ſecretumque
Μȣσειον! quam multa invenitis, quam multa
dictatis!



Angul. Murex p. 123.
q. Carinolus.

LONDON,
Printed for Benj. White,
MDCCLXXVII.

TO THE

DUTCHESS DOWAGER

OF

PORTLAND,

THIS WORK IS DEDICATED,

AS A GRATEFUL ACKNOWLEGEMENT

OF THE MANY FAVORS

CONFERRED BY HER GRACE

ON HER MOST OBLIGED,

AND MOST OBEDIENT

HUMBLE SERVANT,

Downing,
March 1, 1777.

THOMAS PENNANT.

ADVERTISEMENT.

I WISH it had been in my power to have given a perfect concluſion to the ZOOLOGY of our country: but my ſmall acquaintance with INSECTS, and the fourth diviſion of the VIth claſs, *Lithophyta* and *Zoophyta*, forbad me to meddle with them. The Public has little reaſon to regret this omiſſion, ſince the univerſal genius JOHN REINHOLD FORSTER, has hinted * a deſign of undertaking the firſt; and my late worthy friend Mr. ELLIS, (whom LINNÆUS ſo juſtly ſtiles *Lynceus)* has in a great meaſure executed the laſt.

IN my arrangement of the preſent work, I have taken the liberty of making a diſtinct claſs of the CRUSTACEOUS ANIMALS ; and ſeparated them from INSECTS, among which they are uſually placed.

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* Catalogue of Britiſh Inſects. 2.

I HAVE paid implicit reſpect to the *Swediſh* NATURALIST, in my claſſing of the VERMES and SHELLS. I have on another occaſion *, given my ſentiments of that wonderful man, (after RAY) the greateſt illuminator of the ſtudy of Nature. I have borrowed from him the *Latin* trivial names; ſometimes given tranſlations of them; ſometimes given other *Engliſh* names, when I thought them more apt.

GRATITUDE prompts me to mention a moſt irreparable loſs in my amiable friend BENJAMIN STILLINGFLEET, Eſquire, in whom were joined the beſt heart and the ableſt head. Benevolence and innocence were his inſeparable companions. Retirement his choice, from the moſt affectionate of motives ‡. How great, yet how unneceſſary was his diffidence in public! How ample, his inſtruction in private! How clear his information! How delicate the conveyance! The pupil received advantage, edified by the humility of the maſter. Thoroughly imbued in Divine Philoſophy, he had an uncommon inſight into the uſes of every object of Natural Hiſtory; and gave ſanction to thoſe ſtudies, which by trivial obſervers were held moſt contemptible. The end of his labors was the GOOD OF MANKIND. He attempted to deſtroy the falſe ſhame that attended the devotee to Ornithology, the chace of the Inſect, the ſearch after the Cockle, or the poring over the Graſs. He proved every ſubject to be of the greateſt ſervice to the world, by the proper remarks that might be made on them. The traveller, the ſailor, the huſbandman might, if they pleaſed, draw the moſt uſeful concluſions from them. The reader may receive the proof from his tranſlations of various eſſays, the productions of the LINNÆAN ſchool; his own CALENDAR of FLORA, and Obſervations on GRASSES. How much to be lamented is this ſhort catalogue of the works of ſo great, ſo good a man! I ſpeak not of his Eſſay on Muſic, as foreign to the ſubject. Some of his remarks appear in my *Britiſh Zoology*. He thought me ſo far deſerving of his encouragement, as to dedicate part of his time to farther acts of friendſhip. I received the unfiniſhed tokens of his regard by virtue of his promiſe;

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* *Synopſis* of Quadrupeds, Preface vii.

‡ Mr. GRAY's Letters, 288.

the only papers that were reſcued from the flames, to which his modeſty had devoted all the reſt.

Defended by ſo great an example, (howſoever unequally I may follow it) there is hardly any need for an apology for the ſubject of the following ſheets. But if any ſhould require one, I take the liberty of delivering it in the words of my ever regretted friend:

‘ From a partial conſideration of things, ‘ we are very apt to criticiſe what we ought ‘ to admire; to look upon as uſeleſs what ‘ perhaps we ſhould own to be of infinite ‘ advantage to us, did we ſee a little farther; ‘ to be peeviſh where we ought to give thanks; ‘ and at the ſame time to ridicule thoſe, who ‘ employ their time and thoughts in examining what we were, i. e. ſome of us moſt ‘ aſſuredly were, created and appointed to ‘ ſtudy. In ſhort, we are too apt to treat ‘ the Almighty worſe than a rational man ‘ would treat a good mechanic; whoſe ‘ works he would either thoroughly exa‘mine, or be aſhamed to find any fault with ‘ them. This is the effect of a partial conſi‘deration of Nature; but he who has can-

'dour of mind, and leiſure to look farther,
'will be inclined to cry out:

'How wond'rous is this ſcene! where all is form'd
'With number, weight, and meaſure! all deſign'd
'For ſome great end! where not alone the plant
'Of ſtately growth; the herb of glorious hue,
'Or food-full ſubſtance; not the laboring ſteed,
'The herd, and flock that feed us; not the mine
'That yields us ſtores for elegance, and uſe;
'The ſea that loads our table, and conveys
'The wanderer man from clime to clime, with all
'Thoſe rolling ſpheres, that from on high ſhed down
'Their kindly influence; not theſe alone,
'Which ſtrike ev'n eyes incurious, but each moſs,
'Each ſhell, each crawling inſect holds a rank
'Important in the plan of Him, who fram'd
'This ſcale of beings; holds a rank, which loſt
'Wou'd break the chain, and leave behind a gap
'Which Nature's ſelf would rue. Almighty Being,
'Cauſe and ſupport of all things, can I view
'Theſe objects of my wonder; can I feel
'Theſe fine ſenſations, and not think of thee?
'Thou who doſt thro' th' eternal round of time;
'Doſt thro' th' immenſity of ſpace exiſt
'Alone, ſhalt thou alone excluded be
'From this thy univerſe? Shall feeble man
'Think it beneath his proud philoſophy
'To call for thy aſſiſtance, and pretend
'To frame a world, who cannot frame a clod?——
'Not to know thee, is not to know ourſelves——
'Is to know nothing—nothing worth the care
'Of man's exalted ſpirit—all becomes
'Without thy ray divine, one dreary gloom;
'WHERE lurk the monſters of phantaſtic brains,

‘ Order bereft of thought, uncaus’d effects,
‘ Fate freely acting, and unerring Chance.
‘ Where meanleſs matter to a chaos ſinks
‘ Or ſomething lower ſtill, for without thee
‘ It crumbles into atoms void of force,
‘ Void of reſiſtance—it eludes our thought.
‘ Where laws eternal to the varying code
‘ Of ſelf-love dwindle. Intereſt, paſſion, whim
‘ Take place of right, and wrong, the golden chain
‘ Of beings melts away, and the mind’s eye
‘ Sees nothing but the preſent. All beyond
‘ Is viſionary gueſs—is dream—is death.’

SYSTEMATIC INDEX

OF

PLATES.

CLASS V. CRUSTACEOUS.

GENUS I. CRABS.

PLATE	I.	N°	1.	Pea.
			2.	Minute.
			3.	Long-horned.
			4.	Broad-foot.
	II.		5.	Common.
			6.	Cleanſer.
	III.		7.	Black-clawed.
	IV.		8.	Velvet.
			A.	6.
	V.		9.	Wrinkled.
			10.	Angular.
	VI.		11.	Briſtly.
			12.	Great-clawed.

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PLATE VII.	Nº 13.	Long-clawed M. and F.
VIII.	14.	Horrid.
	15.	Four-forked.
IX.	16.	Spider.
	17.	Slender-legged.
A.	18.	Weymouth.
	19.	Uneven.
	20.	Rough.

GENUS II. LOBSTERS.

X.	21.	Vulgar.
XI.	22.	Spiny.
XII.	24.	Norway.
	32.	Atom.
XIII.	25.	Long-clawed.
XIV.	26.	Plated.
XV.	27.	Craw-fiſh.
	30.	Shrimp.
XVI.	28.	Prawn.
	31.	Linear.
XVII.	38.	Hermit.

ONISCI,

SYSTEMATIC INDEX OF PLATES.

ONISCI, &c.

PLATE XVIII. N° 1. O. Pſora.
2. Linearis.
3. Marinus.
4. Oceanicus.
5. Entomon.
6. Oeſtrum.
7. PHALANGIUM Balænæ.
SCOLOPENDRA Marina. *No.* III. *Tab.* xxv.

CLASS VI. WORMS.

DIV. I. INTESTINE.

PLATE XIX. N° 6. Greater DEW-WORM.
6.A. Leſſer DEW-WORM.
7. LUG-WORM.
XX. 3. Marine HAIR-WORM.
10. Naked TUBE-WORM.
13. Geometrical LEECH, from *Roeſel*'s Inſects.
14. Tuberculated LEECH.
15. Glutinous HAG.

DIV.

DIV. II. SOFT.

PLATE XXI.	N° 21.	Depilatory LAPLYSIA.
	23.	Warty DORIS.
XXII.	22.	Lemon DORIS.
XXIII.	25.	Aculeated APHRODITE.
	26.	Scaled APH.
	35.	Ruſtic ASCIDIA.
XXIV.	27.	Pedunculated APHRODITA.
	28.	Annulated APH.
	29.	Minute APH.
	24.	Amber DORIS.
XXV.	32.	Blue NEREIS.
	33.	Red N.
	111.	Sea SCOLOPENDRA.
XXVI.	41.	Five-rowed HOLOTHURIA.
XXVII.	43.	Great CUTTLE.
XXVIII.	44.	Eight-armed C.
XXIX.	45.	Middle C.
	46.	Small C.
XXX.	56.	Dotted ASTERIAS.
	58.	Hiſpid AST.
XXXI.	59.A.	Flat AST.
XXXII.	63.	Beaded AST.
	62.	Lizard AST.
XXXIII.	71.	Ten-rayed AST.
XXXIV.	74.	Eatable ECHINUS.
	75.	Cordated ECH.
XXXV.	76.	Oval ECH.

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CLASS VI. DIV. III. SHELLS.

* MULTIVALVE.

PLATE XXXVI.	N° 1.	Hairy CHITON.
	2.	Marginated CH.
	3.	Smooth CH.
XXXVII.	4.	Common ACORN. LEPAS
	5.	Sulcated A.
	6.	Corniſh A.
XXXVIII.	7.	Striated A.
	9.	Anatiferous A.
XXXIX.	10.	Dactyle PHOLAS.
	11.	White PH.
XL.	12.	Curled PH.
	13.	Little PH.

** BIVALVE.

XLI.	14.	Abrupt MYAS.
XLII.	16.	Sand M.
XLIII.	17.	Painter's M.
	18.	Pearl M.
XLIV.	19.	Dubious.
XLV.	20.	Pod RAZOR.
	22.	Scymeter R.

PLATE

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Plate XLVI. N°	21.	Sheath Razor.
	23.	Pellucid R.
	24.	Sub-oval R.
	25.	Kidney R.
XLVII.	26.	Fragile Telline.
	27.	Depreſſed T.
	31.	Carnation T.
XLVIII.	28.	Flat T.
	29.	Plain T.
XLIX.	30.	Rayed T.
	32.	Fleſh-coloured T.
	36.	Horny T.
L.	37.	Aculeated Cockle.
	39.	Fringed C.
	41.	Edible C.
LI.	40.	Smooth C.
	43.A.	Strong Mactra.
LII.	42.	Simpleton's M.
	43.	Strong M.
	44.	Large M.
	45.	Yellow Donax. } In pl. LV.
	46.	Purple.
LIII.	47.	Commercial Venus.
LIV.	48.	*Sicilian* V.
	49.A.	Antiquated V.
LV.	51.	Waved V.
	51.A.	Indented V.
LVI.	50.	Wrinkled V.
	49.	Antiquated V.
	56.	Oval V.

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PLATE LVII. N° 53. Lettered VENUS.
54. Fading V.
34. Rugged TELLINE. *Vide* p: 88
LVIII. 58. Orbicular ARCA.
59. Bearded A.
LIX. 61. Great SCALLOP.
LX. 62. Leſſer Sc.
63. Red Sc.
LXI. 64. Variegated Sc.
65. Writhed Sc.
66. Worn Sc.
LXII. 70. Larger ANOMIA. This adheres to the Common OYSTER, N° 69.
LXIII. 72. Rugged MUSSEL.
73. Edible M.
75. Pellucid M.
LXIV. 74. Incurvated M.
76.A. Short M.
LXV. 76. Umbilicated M.
LXVI. 77. Great M.
LXVII. 78. Swan M.
LXVIII. 79. Duck M.
LXIX. 80. Brittle NACRE.

*** TURBINATED SHELLS.

PLATE LXX. N° 82. Common GOWRIE.
83. Wood DIPPER.
85. Cylindric D.
85.A. Open D.

PLATE

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PLATE LXXI.	N°86.	Oval VOLUTE.
	87.	*Jona* V.
LXXII.	88.	Brown WHELK.
	89.	Maſſy W.
	92.	Reticulated W.
LXXIII.	90.	Waved W.
LXXIV.	91.	Striated W.
LXXV.	94.	Corvorant's foot STROMBUS.
LXXVI.	95.	Urchin MUREX.
	99.	Horny M.
LXXVII.	96.	Angulated M. Engraven alſo in the Frontiſpiece.
LXXVIII.	98.	Deſpiſed M.
LXXIX.	100.	Buccina and Murices.
	101.	
	102.	
	103.	Minute BUCCINUM.
LXXX.	103.	Livid TOP.
	104.	Cornule T.
	106.	Umbilical T.
	107.	Tuberculated T.
	108.	Land T.
LXXXI.	109.	Perriwinkle WREATH.
	111.	Barred WR.
	111.A.	Variety of the ſame.
	112.	Doubled WR.
	113.	Auger WR.
	117.	Bident.

PLATE

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PLATE LXXXII.	N° 110.	Tumid WREATH.
	* 111.	Studded WR.
	116.	Reverſe WR.
	118.	Moſs WR.
	119.	Faſciated WR.
LXXXIII.	121.	Rock SNAIL.
	123.	Flat S.
	124.	Whirl S.
	125.	Dwarf S.
	126.	Horny S.
LXXXIV.	128.	Exotic S.
	129.	Garden S.
	132.	Viviparous S.
LXXXV.	122.	Grey S.
	127.	Mottled S.
	130.	Shrub S.
	133.	Zoned S.
LXXXVI.	135.	Eight-ſpired S.
	136.	Lake S.
	137.	Mud S.
	138.	Ear S.
	139.	Smoothed S.
	140.	Olive S.
LXXXVII.	141.	Livid NERITE.
	142.	River N.
	143.	Strand N.
LXXXVIII.	144.	Tuberculated HALIOTIS.

SYSTEMATIC INDEX OF PLATES

**** UNIVALVE SHELLS not turbinated.

PLATE LXXXIX. N°	145.	Common LIMPET.
	146.	Flat L.
	153.	Striated L.
XC.	147.	Bonnet L.
	148.	Inclining L.
	150.	Tranſparent L.
	151.	Smooth L.
	152.	Slit L.
	154.	Common TOOTH-SHELL.
XCI.	155.	Spiral SERPULE.
	157.	Intricate S.
	158.	Twined S.
XCII.	162.	Honey-combed SABELLA
	163.	Tube S.
	161.	Coarſe S, *Vide tab.* XXV. and 39.
XCIII.		Beardleſs OPHIDIUM. *Br. Zool.* iii. Appendix.

In Plate LXXIX is engraven the BUCCINUM DECUSSATUM from *Weymouth*. It is a young ſhell. When old, the lip is revolute and granulated.

In Plate LXIV. at the bottom, are three etchings of a *Mytilus*, from *Weymouth*: a new ſpecies.

BRITISH ZOOLOGY.

CLASS V.

CRUSTACEA.

CRUSTACEOUS ANIMALS.

BRITISH ZOOLOGY.

CLASS V.

CRUSTACEOUS ANIMALS.

CANCER. CRAB.

With eight feet, or ten; rarely ſix.
Two of the feet clawed.
Two eyes, remote; for the moſt part fixed on a ſtalk, moveable.
Tail foliated, and ſhort, lodged in a groove in the body.

C. *Lin. Syſt.* 1039.

Piſum. 1. Pea.

Cr. WITH rounded and ſmooth thorax, entire and blunt. With a tail of the ſize of the body, which commonly is of the bulk of a pea.

Inhabits the muſſel, and unjuſtly has acquired the repute of being poiſonous. The ſwelling after eating of muſſels is wholly conſtitutional; for one that is affected by it, hundreds remain uninjured.

CRABS, either of this kind, or allied to them, the antients believed to have been the conſentaneous inmates of the *pinnæ*, and other bivalves; which being too ſtupid to perceive the approach of their prey, were warned of it by their vigilant friend. *Oppian* tells the fable prettily *.

Οσρακον αυ βυζιας, &c.

In clouded deeps below the *Pinna* hides,
And thro' the ſilent paths obſcurely glides;
A ſtupid wretch, and void of thoughtful care,
He forms no bait, nor lays the tempting ſnare.
But the dull ſluggard boaſts a *Crab* his friend,
Whoſe buſy eyes the coming prey attend.
One room contains them, and the partners dwell
Beneath the convex of one ſloping ſhell;
Deep in the wat'ry vaſt the comrades rove,
And mutual int'reſt binds their conſtant love;
That wiſer friend the lucky juncture tells,
When in the circuit of his gaping ſhells
Fiſh wand'ring enter; then the bearded guide
Warns the dull mate, and pricks his tender ſide;
He knows the hint, nor at the treatment grieves,
But hugs th' advantage, and the pain forgives:
His cloſing ſhells the *Pinna* ſudden joins,
And 'twixt the preſſing ſides his prey confines;
Thus fed by mutual aid, the friendly pair
Divide their gains, and all the plunder ſhare.

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* *Halieut. lib.* ii. He calls the crab Πιννοφυλαξ, *cuſtos Pinnæ.*

C. *Lin. Syſt.* 1040. *Gronov. Zooph. No.* 962. *Minutus.*
Baſter, ii. *p.* 26. *tab.* iv. *f.* 1. 2. 2. MINUTE.

CR. with a ſmooth and ſomewhat ſquare thorax; the edges ſharp; horns ſhort; leſs than the laſt.

Inhabits our ſhores among *Algæ*.

C. *Lin. Syſt.* 1040. *Gronov. Zooph. No.* 968. *Longicornis.*
Baſter, ii. *p.* 26. *tab.* iv. *f.* 3. 3. LONG-HORNED.

CR. with a round ſmooth thorax; with large claws; very long horns; ſize of the laſt.

Inhabits our ſhores.

Cancer latipes. *Rondel,* 565. *Gronov. Zooph. No.* 954. *Latipes.*
Cancer latipes parvus oblongus variegatus. *Plancus,* 34. *tab.* iii. *fig.* 7. 4. BROAD-FOOT.

CR. with a ſub-cordated body; ſhort feelers; angular claws; five ſmall teeth on each ſide; the hind legs ovated.

C. *Lin. Syſt.* 1043. *Baſter,* ii. *tab.* ii. *f.* 1. *Mænas.*
Faun. Suec. No. 2026. *Gronov. Zooph.* 955. 5. COMMON.

CR. with three notches on the front; five ſerrated teeth on each ſide; claws ovated; next joint, toothed; hind feet ſubulated; dirty green color; red when boiled.

Inhabits all our ſhores; and lurks under the *Algæ*, or burrows under the ſand. Is ſold; and eaten by the poor of our capital.

Depurator.
6. Cleanser.

C. *Lin. Syſt.* 1043. *No.* 23.
Seb. Muſ. iii. *tab.* xviii. *fig.* 9.

Cr. with a ſub-cordated body; thorax on each ſide quinque-dentated; front indented; claws angulated; ſecond joint ſpined; hind legs have the two laſt joints ovated and ciliated.

A. vi. Variety with a tuberculated ſurface. *Vide* tab. iv.

Inhabits generally the deeps; feeds on dead fiſh: hence called *the purifier* or *cleanſer*, as cauſing the removal of putrid bodies.

Pagurus.
7. Black-clawed.

C. *Lin. Syſt.* 1044. *Gronov. Zooph. No.* 967.
Belon. aquat. 368. *Rondel. piſc.* 560. *Faun. Suec. No.* 2028.
Merret's Pinax.

Cr. with a crenated thorax; ſmooth body; quinque-dentated front; ſmooth claws with black tips; hind feet ſubulated.

Inhabits the rocky coaſts; the moſt delicious meat of any; caſts its ſhell between *Chriſtmas* and *Eaſter*.

The tips of the claws of this ſpecies are uſed in medicine; intended to abſorb acidities in the ſtomach and bowels.

Velutinus. 8. VELVET.

CR. with the thorax quinque-dentated; body covered with ſhort brown velvet-like pile; claws covered with minute tubercles; ſmall ſpines round the top of the ſecond joint; hind legs broadly ovated. This is among the ſpecies taken notice of by *Ariſtotle* * on account of the broad feet, which, he ſays, aſſiſt them in ſwimming: as web-feet do the water-fowl.

Inhabits the weſtern coaſts of *Angleſea*.

Corrugatus. 9. WRINKLED.

CR. with the thorax quinque-dentated; ſerrated; body wrinkled tranſverſely; claws furniſhed with a ſingle ſpine on the firſt and ſecond joint; fangs ſerrated; laſt pair of legs ovated.

Found on the ſhores of *Skie*, oppoſite to *Loch Jurn*.

Angulatus. 10. ANGULAR.

CR. with a rectangular body; the thorax armed near the corner with two ſpines; the claws very long; the upper fangs black; legs ſlender and ſubulated.

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* *De Part. Anim. lib.* iv. *c.* 8.

Weymouth. From the PORTLAND cabinet.

Hirtellus. 11. BRISTLY. C. *Lin. Syſt.* 1045. *Faun. Suec. No.* 2029. Cancer hirſutus. *Rondel.* 568.

CR. with a hairy thorax; on both ſides ſlightly quinque-dentated; claws ovated, ſlightly echinated, and hairy; feet, briſtly and ſubulated. A ſmall ſpecies; of a reddiſh color.

Found beneath ſtones.

Platy-cheles. 12. GREAT-CLAWED. CR. with a tridentated front; thorax entire; claws of a large ſize; depreſſed, and greatly ciliated on the outſide; only three ſubulated legs on each ſide; body little bigger than a horſe-bean, and almoſt round: *Antennæ* very long and turning back, when not in uſe.

Inhabits the *Algæ* on the coaſt of *Angleſea* and the *Hebrides.*

Caſſi-velaunus. 13. LONG-CLAWED. CR. with bifurcated front; a ſpine at the corner of each eye; another on each ſide of the thorax towards the tail; body ovated and ſmooth; *Antennæ* of the length of the body; the claws above; as long again as the body; feet ſubulated. The ſuppoſed female; of the ſame form; only the claws not half ſo long.

Inhabits the deep near *Holyhead* and *Red-Wharf Angleſea*. Dredged up.

Cancer. *Lin. Syſt.* 1047.
C. ſpinoſus. *Seb. Muſ.* iii. *tab.* xxii. *f.* 1. *Gronov. Zooph. No.* 976.
Fans, Trold Crabber. *Pontop. Norway* ii. 176. *tab. p.* 177.

Horridus.
14. HORRID.

CR. with a projecting bifurcated ſnout, the end diverging; body heart-ſhaped; and with the claws and legs covered with long and very ſharp ſpines. A large ſpecies.

Inhabits the rocks on the eaſtern coaſt of *Scotland*. Common to *Norway* and *Scotland*, as many of the marine animals and birds are.

Tetra-odon.
15. FOUR-FORKED.

CR. with a quadri-furcated ſnout; the two middle ſpines the longeſt; thorax ſpiny; body heart-ſhaped and uneven; claws long; legs ſlender.

Inhabits the *Iſle of Wight*.

Cancer. *Lin. Syſt.* 1044.
Faun. Suec. No. 2030. *Jonſton Exang. tab.* v. *fig.* 13.

Araneus.
16. SPIDER.

CR. with a bifid ſnout; briſtly thorax; body, heart-ſhaped, and tuberculated; claws long and oblongly ovated; legs ſlender, long and ſubulated.

Inhabits our ſhores. Often covered with a *byſſus*, as in ſpecimen xvi. A.

Phalangium. 17. Slender-leg'd. Cr. with a bifid ſnout; heart-ſhaped, ſmall tuberculated body; long claws; legs of a vaſt length, very ſlender, and hairy.

Inhabits the depths on the coaſts of *Angleſea*.

Dorſettenſis. 18. Weymouth. Cr. with a cordated body, rugged and bent, with a few ſpines; very thick, and long claws; and very ſlender legs, the firſt pair much longer than the reſt.

Weymouth. From the Portland cabinet.

Tuberoſus. 19. Uneven. Cr. with a tuberous, ſmooth back; ſmall claws, and ſhort legs; ſnout ſlightly bifid.

From the ſame cabinet.

Aſper. 20. Rough. Cr. with a cordated body; bifid ſnout; legs and claws ſhort; thoſe and the body rough and ſpiny.

From the ſame cabinet.

ASTACUS.
LOBSTER.

Cylindric body.
Long antennæ.
Long tail.

Cancer. *Lin. Syſt.* 1050. *No.*
Aſtacus. *Rondel.* 538.

Gammarus.
21. VULGAR.

L. WITH a ſmooth thorax; ſhort ſerrated ſnout; very long *antennæ*; and between them two ſhorter, bifid; claws and fangs, large, the greater tuberculated, the leſſer ſerrated on the inner edge; four pair of legs; ſix joints in the tail; caudal fins rounded.

Inhabits all the rocky ſhores of our iſland; but chiefly where there is a depth of water. In *Llyn*, in *Caernarvonſhire*, a certain ſmall lobſter, nothing different except in ſize, burrows in the ſand.

Brought in vaſt quantities from the *Orkney* iſles, and many parts of the eaſtern coaſt of *Scotland*, to the *London* markets. Sixty or ſeventy thouſand are annually brought, in well-boats, from the neighborhood of *Montroſe* alone *.

Lobſters fear thunder; and are apt to caſt their claws on a great clap. I am told they will do the ſame on firing a great gun; and that when men of war meet a lobſter-boat, a jocular threat is uſed, That, if the maſter does not ſell them good lobſters, they will *ſalute him.*

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* Tour in *Scotland*, 1772. *part.* ii. *p.* 146.

The habitation of this ſpecies is in the cleareſt water; at the foot of rocks that impend over the ſea. This has given opportunity of examining more cloſely into the natural hiſtory of the animal, than many others who live in an element that prohibits moſt of the human reſearches, and limits the inquiries of the moſt inquiſitive. Lobſters are found on moſt of the rocky coaſts of *Great Britain.* Some are taken by the hand; but the greater quantity in pots, a ſort of trap formed of twigs, and baited with garbage; they are formed like a wire mouſe-trap, ſo that when the lobſter gets in, there is no return. Theſe are faſtened to a cord ſunk into the ſea, and their place marked by a buoy.

They begin to breed in the ſpring, and continue breeding moſt part of the ſummer. They propagate *more humano*; and are extremely prolific. Doctor *Baſter* ſays he counted 12,444 eggs under the tail, beſides thoſe that remained in the body, unprotruded. They depoſit theſe eggs in the ſand, where they are ſoon hatched.

Lobſters change their cruſt annually. Previous to their putting off their old one, they appear ſick, languid, and reſtleſs. They totally acquire a new coat in a few days; but during the time that they remain defenceleſs they ſeek ſome very lonely place, If a crab or lobster be wounded in a limb it will not wait for a cure but shake off or eject the limb altogether & a new one will ſpeedily ſucceed.

2. How often they can do this?

sm

place, for fear of being attacked and devoured by ſuch of their brethren that are not in the ſame weak ſituation.

It is alſo remarkable, that Lobſters and Crabs will renew their claws, if by accident they are torn off; and it is certain they will grow again in a few weeks.

They are very voracious animals, and feed on ſea-weeds, on garbage, and on all ſorts of dead bodies.

Additional to this, I beg leave to give an accurate account of the natural hiſtory of this animal, communicated to me by the ingenious Mr. *Travis*, ſurgeon, at *Scarborough*.

' *Scarborough*, 25th *Oct.* 1768.

' SIR,

' WE have vaſt numbers of fine Lobſters ' on the rocks, near our coaſt. The large ones ' are in general in their beſt ſeaſon from the middle ' of *October* till the beginning of *May*. Many ' of the ſmall ones, and ſome few of the larger ' ſort are good all the ſummer. If they be four ' inches and a half long or upwards, from the tip ' of the head to the end of the back ſhell, they ' are called *ſizeable Lobſters*. If only four inches, ' they are eſteemed half ſize; and when ſold, two ' of them are reckon'd for one of ſize. If they ' be under four inches, they are called *pawks*, and are not ſaleable to the carriers, though, in reality, they are in the ſummer months ſuperior to the large ones in goodneſs. The pincers of one of the lobſters large claws are furniſhed with knobs, and thoſe of the other claw are always ſerrated. With the former it keeps firm hold of the ſtalks of ſubmarine plants, and with the latter it cuts and minces its food very dextrouſly. The knobbed or numb claw, as the Fiſhermen call it, is ſometimes on the right and ſometimes on the left, indifferently. It is more dangerous to be ſeized by them with the cutting claw than the other; but in either caſe, the quickeſt way to get diſengaged from the creature is to pluck off its claw. It ſeems peculiar to the Lobſter and Crab, when their claws are pulled off, that they will grow again, but never ſo large as at firſt.

Se Wesley I. 157

'The Female or Hen Lobſter does not caſt her ſhell the ſame year that ſhe depoſits her *ova*, or, in the common phraſe, is in *berry*. When the *ova* firſt appear under her tail, they are very ſmall and extremely black; but they become in ſucceſſion almoſt as large as ripe elder-berries before they be depoſited, and turn of a dark brown color, eſpecially towards the end of the time of her depoſiting them. They continue full and depoſiting the *ova* in conſtant ſucceſſion, as long as any of that black ſubſtance can be found

‘ in their body, which, when boiled, turns of a ‘ beautiful red color, and is called their *coral.* ‘ Hen Lobſters are found in *berry* at all times of ‘ the year, but chiefly in winter. It is a common ‘ miſtake, that a berried Hen is always in perfection ‘ for the table. When her berries appear large ‘ and browniſh, ſhe will always be found exhauſted, ‘ watery, and poor. Though the *ova* be caſt at ‘ all times of the year, they ſeem only to come to ‘ life during the warm ſummer months of July and ‘ Auguſt. Great numbers of them may then be ‘ found, under the appearance of tad-poles, ſwimming about the little pools left by the tides among ‘ the rocks, and many alſo under their proper ‘ form, from half an inch to four inches in length.

‘ In caſting their ſhells, it is hard to conceive ‘ how the Lobſter is able to draw the fiſh of their ‘ large claws out, leaving the ſhells entire and ‘ attached to the ſhell of their body; in which ‘ ſtate they are conſtantly found. The fiſhermen ‘ ſay the Lobſter pines before caſting, till the fiſh ‘ in its large claw is no thicker than the quill of a ‘ gooſe, which enables it to draw its parts through ‘ the joints and narrow paſſage near the trunk. The ‘ new ſhell is quite membraneous at firſt, but ‘ hardens by degrees. Lobſters only grow in ſize ‘ while their ſhells are in their ſoft ſtate. They are ‘ choſen for the table, by their being heavy in ‘ proportion to their ſize; and by the hardneſs of

‘ their ſhells on their ſides, which, when in perfection, will not yield to moderate preſſure. ‘ Barnacles and other ſmall ſhell-fiſh adhering to ‘ them are eſteemed certain marks of ſuperior goodneſs. Cock-Lobſters are in general better than ‘ the Hens in winter; they are diſtinguiſhed by ‘ the narrowneſs of their tails, and by their having ‘ a ſtrong ſpine upon the center of each of the ‘ tranſverſe proceſſes beneath the tail, which ſupport the four middle plates of their tails. The ‘ fiſh of a Lobſter's claw is more tender, delicate, ‘ and eaſy of digeſtion than that of the tail. Lobſters are not taken here in pots, as is uſual where ‘ the water is deeper and more ſtill than it is upon ‘ our coaſt. Our fiſhermen uſe a bag-net fixed to ‘ an iron hoop, about two feet in diameter, and ‘ ſuſpended by three lines like a ſcale. The bait is ‘ commonly fiſh-guts tied to the bottom and middle ‘ of the net. They can take none in the day-time, ‘ except when the water is thick and opake; they ‘ are commonly caught in the night, but even ‘ then it is not poſſible to take any when the ſea ‘ has that luminous appearance which is ſuppoſed ‘ to proceed from the *nereis noctiluca*. In ſummer, ‘ the Lobſters are found near the ſhore, and thence ‘ to about ſix fathoms depth of water; in winter, ‘ they are ſeldom taken in leſs than twelve or ‘ fifteen fathoms. Like other inſects, they are ‘ much more active and alert in warm weather

‘ than in cold. In the water they can run nimbly upon their legs or ſmall claws, and if alarmed ‘ can ſpring tail-foremoſt, to a ſurpriſing diſtance, ‘ as ſwift as a bird can fly. The fiſhermen can ‘ ſee them paſs about thirty feet, and by the ‘ ſwiftneſs of their motion, ſuppoſe they may go ‘ much farther. *Athenæus* remarks this circumſtance, and ſays, that *the incurvated* Lobſters *will* ‘ *ſpring with the activity of* dolphins. Their eyes ‘ are raiſed upon moveable baſes, which enables ‘ them to ſee readily every way. When frightened, ‘ they will ſpring from a conſiderable diſtance to ‘ their hold, in the rock; and what is not leſs ſurpriſing than true, will throw themſelves into ‘ their hold in that manner, through an entrance ‘ barely ſufficient for their bodies to paſs; as is ‘ frequently ſeen by the people who endeavor to ‘ take them at *Filey Bridge*. In froſty weather, ‘ if any happen to be found near the ſhore, they ‘ are quite torpid and benumbed. A ſizeable ‘ Lobſter is commonly from one pound to two in ‘ weight. There was one taken here this ſummer ‘ which weighed above four, and the fiſhermen ſay ‘ they have ſeen ſome which were of ſix pounds, ‘ but theſe are very rare.

‘ I am, Sir, *&c.*’

I conclude with ſaying, that the Lobſter was well known to the ancients, and that it is well deſcribed by *Ariſtotle*, under the name of Αϛακος[*]; that it is found as far as the *Helleſpont*, and is called, at *Conſtantinople*, [†] *Liczuda*, and *Lichuda*.

Homarus.
22. Spiny.

Cancer, *Lin. Syſt.* 1053.
Locuſta. la Langouſte. *Rondel. piſc.* 535.

L. with a front broad, armed with two large ſpines, and between them a ſmaller, guards to the eyes, which are prominent; *Antennæ* longer than body and tail; ſpiny at their origin; beneath them two leſſer; claws ſhort, ſmall, ſmooth; fangs ſmall, ſingle, hinged; legs ſlender and ſmooth; body and thorax horrid with ſpines; tail longer than that of the common Lobſter; on each part, above, is a white ſpot, the bottoms are crooked and ſerrated; the tail-fin, partly membranaceous, partly cruſtaceous.

Inhabits our rocky coaſts; often taken about the promontory of *Llŷn*, and *Bardſey* iſle.

The *French* name of this ſpecies has been barbarouſly tranſlated into the *Long-oyſter*.

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[*] *Hiſt. An. lib.* iv. *c.* 2.
[†] *Belon Hiſt. Poiſſons.* 357.

Arctus.
23. BROAD.
no engr.

C. *Lin. Syſt.* 1053. *No.* 75. *Faun. Suec. No.* 2040.
Squilla lata. *Rondel.* 545.

L. with two broad ſerrated plates before the eyes; ſhort furcated *antennæ*; body and tail flat and broad.

Size of the ſpiny Lobſter.

Found by Doctor *Borlaſe* on *Careg Killas*, in *Mounts-Bay*. Is common to the four quarters of the world.

Norvegicus.
24. NORWAY.

Cancer Norvegicus. *Lin. Syſt.* 1053.
Sundfiord. *Pontop. Norway.* ii. 175. *tab. p.* 177.

L. with a long ſpiny ſnout; thorax ſlightly ſpiny; body marked with three ridges; claws very long, angular, and (along the angles) ſpiny; *antennæ* long; legs ſlender, clawed; tail long; elegantly marked with ſmooth and ſhort-haired ſpaces, placed alternately.

Common length, from tip of the claws to the end of the tail near nine inches.

Bamffius.
25. LONG-CLAWED.

Leo. *Rondel.* 542.

L. with a ſmooth thorax, with three ſharp ſlender ſpines in front; claws ſix inches and a half long, ſlender and rough; fangs ſtrait; legs weak, briſtly;

antennæ ſlender, two inches and a half long; tail and body about five inches.

Taken near *Bamff.* Communicated to me by the Reverend Mr. *Cordiner*, and engraven from his beautiful drawing.

Strigoſus.
26. PLATED.

Cancer. *Lin. Syſt.* 1052.

L. with a pyramidal ſpiny ſnout; thorax elegantly plated; each plate marked near its junction with ſhort *ſtriæ*; claws much longer than the body, thick, echinated, and tuberculated; the upper fang trifid; only three legs, ſpiny on their ſides; tail broad.

The largeſt of this ſpecies is about ſix inches long.

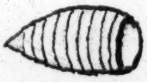
Inhabits the coaſts of *Angleſea*; under ſtones and *fuci*. Very active. If taken, ſlaps its tail againſt the body with much violence and noiſe.

Aſtacus.
27. CRAWFISH.

Cancer. *Lin. Syſt.* 1051.

L. with a projecting ſnout ſlightly ſerrated on the ſides; a ſmooth thorax; back ſmooth, with two ſmall ſpines on each ſide; claws large, beſet with ſmall tubercles; two firſt pair of legs clawed; the two next ſubulated; tail conſiſts of five joints; the caudal fins rounded.

On one side of the prawn near the head there is often found a round excrescence which some have thought to be a disease. I suspect it is a parasite insect of the Oniscus kind, but I have not yet examined them before they are boiled. Afterwards this insect has the following appearance.



It burrows under the shell of the prawn

Inhabits many of the rivers of *England*; lodged in holes which they form in the clayey banks. *Cardan* ſays that this ſpecies is a ſign of the goodneſs of water; for in the beſt water, they are boiled into the reddeſt color *.

Squilla Crangon. *Rondel.* 547.

Serratus.
28. **PRAWN.**

L. with a long ſerrated ſnout bending upwards; three pair of very long filiform feelers; claws ſmall, furniſhed with two fangs; ſmooth thorax; five joints to the tail; middle caudal fin ſubulated; two outmoſt flat and rounded.

Frequent in ſeveral ſhores, amidſt looſe ſtones; ſometimes found at ſea, and taken on the ſurface over thirty fathoms depth of water; cinereous when freſh; of a fine red when boiled.

Cancer Squilla. *Lin. Syſt.* 1051. *Faun. Suec. No.* 2037.
Squilla Batava. *Seb. Muſ.* iii. *p.* 55. *tab.* xxi. *fig.* 9. 10.
Squilla fuſca. *Baſter* ii. 30. *tab.* iii. *fig.* 5.
Squilla Gibba. *Rondel.* 549.

Squilla.
29. **WHITE.**
no engr

L. with a ſnout like the prawn, but deeper and thinner; and feelers longer in proportion to the bulk; the ſub-caudal fins rather larger; is at full growth not above half the ſize of the former.

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* Quoted by *Plot. Hiſt. Staffordſ.* 185.

Inhabits the coaſts of *Kent*; is ſold in *London* under the name of *the white ſhrimp*, as it aſſumes that color when boiled.

Crangon.
30. SHRIMP.

Cancer Crangon. *Lin. Syſt.* 1052.
Squilla marina Batava. *Baſter.* ii. 27. *tab.* iii. *fig.* I. II.
Reeſel inſect. iii. *tab.* lxiii.

L. with long ſlender feelers, and between them two thin projecting *laminæ*; claws with a ſingle-hooked moveable fang; three pair of legs; ſeven joints in the tail; the middle caudal fin ſubulated; the four others rounded and fringed; a ſpine on the exterior ſide of each of the outmoſt.

Inhabits the ſandy ſhores of *Britain*, in vaſt quantities. The moſt delicious of the genus.

Linearis.
31. LINEAR.

Cancer. *Lin. Syſt.* 1056.
Leſſer garnel or ſhrimp. *Marten's Spitzberg.* 115. *tab.* P. *fig.* I.

L. with long ſlender claws, placed very near the head, with a ſlender body, and ſix legs on each ſide; is about half an inch long.

Found in the ſand, on the ſhore of *Flintſhire*; is very frequent in *Spitzbergen*.

Atomos.
32. Atom.

Cancer. *Lin. Syſt.* 1056.
Mirum animalculum in corallinis, &c. *Baſter.* i. 43. *tab.* iv. *fig.* 11.

L. with a ſlender body; filiform *antennæ*; three pair of legs near the head; behind which are two pair of oval *veſiculæ*; beyond, are three pair of legs, and a ſlender tail between the laſt pair.

Very minute. The help of the microſcope often neceſſary for its inſpection.

Suppl. XII n°32. but the fig. does not agree with this description

Pulex.
33. Flea.

no engr.

C. *Lin. Syſt.* 1055. *No.* 81.

L. with five pair of legs, and two pair of claws imperfect; with twelve joints in the body.

Very common in fountains and rivulets; ſwims ſwiftly in an incurvated poſture on its back; embraces and protects its young between the legs; does not leap.

Locuſta.
34. Locust.

no engr.

L. *Lin. Syſt.* 1055. *No.* 82.
Roſel Inſect. iii. *tab.* 62.

L. with four *antennæ*; two pair of imperfect claws; the firſt joint ovated; body conſiſts of fourteen joints, in which it differs from the former.

Abounds in ſummer-time on the ſhores, beneath ſtones and *algæ*; leaps about with vaſt agility.

Salinus.
35. SALT.
no engr.

Cancer. *Lin. Syſt.* 1056.

L. with jointed body; hands without claws; *antennæ* ſhorter than the body; ten pair of legs; tail filiform, ſubulated; very minute.

Diſcovered by Doctor *Maty* in the ſalt pans at *Limington.*

Stagnalis.
36. POND.
no engr.

Cancer. *Lin. Syſt.* 1056.

L. with jointed body; hands without claws; a bifid tail.

Inhabits the crannies of rocks, in freſh waters; ſuſpected by *Linnæus* to be the *larva* of an *Ephemera.*

The two laſt never fell under my notice.

Mantis.
37. MANTIS.
no engr.

C. *Lin. Syſt.* 1054. *No.* 76.

L. with ſhort *antennæ*; ſhort *thorax*, and two pinnated ſubſtances on each ſide; three pair of claws with hairy ends; the body long, divided by eight ſegments: two fins on each ſide of the tail; tail conoid, with ſpines on the margin.

From the PORTLAND cabinet.

Weymouth.

Cancer. *Lin. Syſt.* 1049.

Bernardus.
38. HERMIT.

C. with rough claws; the right claw is the longer; the legs ſubulated, and ſerrated along the upper ridge; the tail naked and tender, and furniſhed with a hook, by which it ſecures itſelf in its lodging.

This ſpecies is paraſitic, and inhabits the empty cavities of turbinated ſhells, changing its habitation according to its increaſe of growth, from the ſmall *nerite*, to the large *whelk*. Nature denies it the ſtrong covering behind, which it has beſtowed on others of this claſs, and therefore directs it to take refuge in the deſerted caſes of other animals.

Ariſtotle deſcribes it very exactly under the name of Καρκινιον [*]. By the moderns it is called the *ſoldier*, from the idea of its dwelling in a tent; or the *hermit*, from retiring into a cell.

V [illegible] I. 103.

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[*] *Hiſt. An. lib.* iv. *c.* 4. *lib.* v. *c.* 15.

[illegible] the [illegible] the [illegible] and [illegible] the tail [illegible] hatched [illegible]

[illegible] according to [illegible] the [illegible] to the [illegible] Many [illegible] of [illegible] hatched [illegible] to [illegible] animals. [illegible] the name [illegible] that the [illegible] as the [illegible]

[illegible]

TABLE XVIII.

MARINE INSECTS.

I. ONISEUS Pſora.

II. Linearis.

III. Marinus. *Pallas Spicil.* faſc. ix, tab. iv. f. 6.

IV. Oceanicus.

V. Entomon.

VI. Oeſtrum.

VII. PHALANGIUM Balænæ.

N° III. of TABLE XXV.

SCOLOPENDRA Marina.

CLASS VI.

VERMES.

WORMS.

Div. I. INTESTINE.
II. SOFT.
III. TESTACEOUS.

CLASS VI.

VERMES.

WORMS.

MIHI CONTUENTI SESE PERSUASIT RERUM NATURA, NIHIL INCREDIBILE EXISTIMARE DE EA.

Plinii lib. xi. c. 3.

SLOW, ſoft, expanding, tenacious of life, ſometimes capable of being new formed from a part; the enliveners of wet places; without head or feet; hermaphroditical; to be diſtinguiſhed by their feelers.

Not improperly called by the ancients, *imperfect animals*; being deſtitute of head, ears, noſe, and feet, and for the moſt part of eyes; moſt different from inſects; from which LINNÆUS has long ſince removed theſe works of Nature.

They may be divided into INTESTINE, SOFT, TESTACEOUS, LITHOPHYTES, and ZOOPHYTES.

The INTESTINE (heretofore ſtyled *the earthly*) perforate all things by help of the great ſimplicity of their form. The GORDIUS pierces the clay, that the water may percolate; the LUMBRICUS, the common ſoil, leaſt it ſhould want moiſture; the MYXINE, dead bodies, in order that they may fall innoxiouſly to pieces; the TEREDO, wood, to promote its decay. In like manner, PHOLADES, and ſome ſorts of muſſels penetrate even rocks, to effect their diſſolution.

The MOLLUSCA, or SOFT, are naked, furniſhed with arms; for the moſt part wander through the vaſt tract of ocean; by their phoſphoreous quality illuminate the dark abyſs, reflecting lights to the heavens; thus what is below correſponds with the lights above.

Theſe MOLLUSCA often become the inhabitants of teſtaceous calcareous covers, which they carry about with them, and often they themſelves penetrate calcareous bodies; like inſects, are multiplied into infinite variety: and exhibit, both in form and colors, ſplendid examples of the excelling powers of the all-mighty Artificer. Nor are they without their uſes; ſeveral ſpecies afford a delicious and nouriſhing nutriment. The healing art calls in the ſnail in conſumptive caſes; and the ſhells calcined are of known efficacy in ſtubborn acidities. Shells are the great manure of lands in many parts of theſe kingdoms. The pearls of *Great Britain* have been celebrated from the time of *Cæſar*.

CLASS VI.

VERMES.

WORMS.

Div. I. INTESTINE.

I. With a filiform body, of equal thickneſs; ſmooth.

GORDIUS.
HAIR-WORM.

Gordius. *Lin. Syſt.* 1075. *Faun. Suec. No.* 2068.
Vitulus aquaticus. *Geſner aq.*

Aquaticus.
1. Water.

no engr

G. OF a pale color, with the ends black.
Inhabits boggy places, and clay at the bottom of water.

G. *Lin. Syſt.* 1075. *Faun. Suec. No.* 2069.

Argillaceous.
2. Clay.

no engr

G. of an uniform yellow color.

G. *Lin.*

Marinus.
3. Marine.

G. *Lin. Syſt.* 1075.

no engr

G. filiform, twiſted ſpirally and lying flat. *Tab.* xx. *fig.* 3.

Common in the inteſtines of the herring and other ſea-fiſh. *Ariſtotle* * remarks that the *Ballerus* and *Tillo* are infeſted in the dog-days with a worm that torments them ſo much, that they riſe to the top of the water, where the heat deſtroys them. *Bleaks* are obſerved to riſe at certain ſeaſons to the ſurface, and tumble about for a conſiderable ſpace, in ſeeming agonies. I ſuſpect them to be affected in the ſame manner with thoſe *Ariſtotelian* fiſh.

ASCARIS. II. Slender filiform body, attenuated at each end.

Vermicularis.
4. Vermicular.

Aſcaris. *Lin. Syſt.* 1076.

no engr

Asc. With faint annular *rugæ*; thicker at one end than the other; mouth tranſverſe.

Inhabits, according to *Linnæus*, boggy places, and under the roots of decayed plants; found in the *rectum* of children and horſes; often obſerved in the dung of the laſt; emaciates children greatly; is ſometimes vomited up.

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* *Hiſt. An. lib.* viii. *c.* 20.

Lumbricoides.
5. COMMON.

Aſcaris. *Lin. Syſt.* 1076.

no engr.

Asc. with a ſlender body, ſubulated at each end; but the tail triangular; grows to the length of nine inches; viviparous; and produces vaſt numbers.

Inhabits the human inteſtines.

LUMBRICUS.
DEW-WORM.

III. Slender annulated body, furniſhed with a lateral pore.

Terreſtris.
6. DEW.

Lumbricus. *Lin. Syſt.* 1076. *Faun. Suec. No.* 2073.
Raii inſect. 1.

L. with a hundred and forty rings; head taper; mouth, at the end, round; fore part of the worm cylindric, the reſt depreſſed; at about one third of its length is a prominent annulated belt; on each ſide of the belly a row of minute ſpines, diſtinguiſhable only by the touch; aſſiſtant in motion. *Tab.* xix. *fig.* 6.

Minor.
A. LESSER.

A variety only of the former; excepting in ſize, reſembling it. *Raii inſect.* 2.

Inhabits the common ſoil, and by perforating, renders it apt to receive the rain; devours the *cotyledons* of plants, or part of the ſeed that vegetates; comes out at night to copulate; is the food of moles, hedge-hogs, birds, &c. In *Engliſh*, the *Dew* or *Lobworm*. *Tab.* xix. *fig.* 6. A.

Inteſtinalis.
B. INTESTINAL.
no engr.

Inhabits the leſſer inteſtines of the human ſpecies, chiefly of children; does not differ in the leſt from the former kinds.

Marinus.
7. LUG.

L. marinus. *Lin. Syſt.* 1077. *Faun. Suec. No.* 2074. *Belon. aq.* 444.

L. with round mouth, and circular body annulated with greater and leſſer rings; the firſt prominent; on each of them are two tufts of ſhort briſtles placed oppoſite; the tail-part is ſmooth; elegant ramifications are obſerved to iſſue from among the tufts in the living worm; is ſoft and full of blood.

Inhabits ſandy ſhores, burying itſelf deep; but its place diſtinguiſhable by a little riſing, with an aperture on the ſurface; of great uſe as a bait for fiſh. *Tab.* xix. *fig.* 7.

IV. Flattiſh body; a pore at the extremity, and on the belly.

FASCIOLA.
FLUKE.

Faſciola. *Lin. Syſt.* 1077. *Faun. Suec. No.* 2075. *Amæn. Acad.*
Ræſel. app. tab. xxxii. *f.* 5. *Borlaſe Nat. Hiſt. Cornwall, tab.* xx. *fig.* 10.

Hepatica.
8. LIVER.

no engr.

F. with an ovated body, a little ſharper on the fore part; in the centre is a white ſpot, with a line of the ſame color paſſing towards each extremity.

Infeſts the livers of ſheep and hares.

Faſciola. *Lin. Syſt.* 1078. *Faun. Suec. No.* 2076.
Lin. Syſt. ed. vi. 70. *tab.* vi. *f.* 1.

Inteſtinalis.
9. INTESTINE.

no engr.

F. with a long ſlender body, if extended; when contracted, of a ſub-oval form.

Inhabits the inteſtines of freſh-water fiſh; diſcovered in *breams* and *ſticklebacks.*

SIPUNCULUS.
TUBE-WORM.

V. A ſlender lengthened body.

Mouth, at the very end; attenuated, cylindric.

Aperture on the ſide of the body.

Nudus.
10. NAKED.

Sipunculus. *Lin. Syſt.* 1078.
Vermis macrorhynchopterus. *Rondel. Zooph.* 110. *Geſner. aq.* 1026.
Syrinx. *Bohedſch. marin.* 93. *tab.* vii. *fig.* 6. 7.

T. With a cylindric extended mouth, laciniated round the inner edges; body rounded, taper, at the end globoſe; about eight inches long; aperture at the ſide, a little below the mouth. *Tab.* xx. *fig.* 10.

Inhabits the ſea.

HIRUDO.
LEECH.

VI. Body oblong; moves by dilating the head and tail, and raiſing the body into an arched form.

Medicinalis.
11. MEDICINAL.

H. *Lin. Syſt.* 1079. *Faun. Suec. No.* 2079. *Raii inſect.* 3. *Geſner piſc.* 425.

no engr.

L. With a brown body, marked with ſix yellow lines.

Inhabits

Mr. Leake of Cromer imported his leaches from Bordeaux

Inhabits ſtanding waters. The beſt of phlebotomiſts, eſpecially in *hæmorrhoids*. The practice is as old as the time of *Pliny*, who gives it the apt name of *hirudo ſanguiſuga*. Leeches were uſed inſtead of cupping-glaſſes for perſons of plethoric habits, and thoſe who were troubled with the gout in the feet. He aſſerts, that if they left their head in the wound, as ſometimes happened, it was incurable; and informs us, that *Meſſalinus*, a perſon of conſular dignity, loſt his life by ſuch an accident *.

H. *Lin. Syſt.* *Faun. Suec. No.* 2078. *Sanguiſuga.*
Hirudo maximè apud nos vulgaris. *Raii inſect.* 3. 12. HORSE.

no engr

L. with a depreſſed body; in the bottom of the mouth are certain great ſharp tubercles or whitiſh caruncles. The ſlendereſt part is about the mouth; the thickeſt towards the tail; the tail itſelf very ſlender; the belly of a yellowiſh green; the back duſky.

Inhabits ſtanding waters.

Leeches are good barometers, when preſerved in glaſſes, and predict bad weather by their great reſtleſſneſs and change of place.

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* *Lib.* xxxii. *c.* 10.

Geometra. 13. GEOMETRICAL.

H. *Lin. Syſt.* 1080. *Faun. Suec. No.* 2083.
Ræſel. App. tab. xxxii. *f.* 1. 4.

L. with a filiform body; greeniſh, ſpotted with white; both ends dilatable, and equally tenacious.

Inhabits the ſame places; moves as if meaſuring like a compaſs, whence the name; found on trout and other fiſh, after the ſpawning ſeaſon. *Tab.* xx. *fig.* 13.

Muricata. 14. TUBERCULATED.

H. *Lin. Syſt.* 1080. *Faun. Suec. No.* 2080. *Muſ. Ad. Fr.* i. 93.
Hirudo marina. *Rondel. aquat.*
Hirudo piſcium. *Baſter*, i. 82. *tab.* x. *f.* 2.

L. with a taper body; rounded at the greater extremity, and furniſhed with two ſmall horns; ſtrongly annulated, and tuberculated upon the rings; the tail dilated.

Inhabits the ſea; adheres ſtrongly to fiſh, and leaves a black mark on the ſpot. *Tab.* xx. *fig.* 14.

VII. Slender body, carinated beneath. *MYXINE.* HAG
Mouth at the extremity, cirrated.
The two jaws pinnated.
An adipoſe or rayleſs fin round the tail, and under the belly.

M. *Lin. Syſt.* 1080. Putaohl. *Faun. Suec. No.* 2086. *Glutinoſa.* 15. GLUTINOUS.
Muſ. Ad. Fr. i. 91. *tab.* viii. *f.* 4.
Lampetra cæca. *Wil. Icth.* 107. *Raii piſc.* 36.

This ſpecies is amply deſcribed in the definition; is about eight inches long.

Inhabits the ocean; enters the mouths of fiſh, when on the hooks of lines that remain a tide under water, and totally devours the whole, except ſkin and bones. The *Scarborough* fiſhermen often take it in the *robbed fiſh*, on drawing up their lines. They call it the *hag*. *Linnæus* attributes to it the property of turning water into glue. *Tab.* xx. *fig.* 15.

DIV. II. MOLLUSCA. SOFT.

Animals of a ſimple form, (naked) without a Shell; furniſhed with members.

LIMAX. SLUG. VIII. Oblong body; attenuated towards the tail.
Above, is a fleſhy buckler, formed convexly; flat beneath.
A lateral hole on the right ſide, for its genitals, and diſcharge of excrements.

Ater. 16. BLACK. L. *Lin. Syſt.* 1081. *Faun. Suec. No.* 2088. *Liſt. Angl.* 131. *Geſner. aq.* 254.

no engr

SL. wholly black.

Rufus. 17. BROWN. L. *Lin. Syſt.* 1081. *Faun. Suec. No.* 2089. *Liſt. Angl. App.* 6. *tab.* ii. *fig.* 1.

no engr

SL. of a browniſh color.

L. *Lin. Syſt.* 1081. *Faun. Suec. No.* 2090. *Liſt. Angl.* App. 6. *tab.* ii. *fig.* 2.
Liſt. Angl. 127.

Maximus.
18. GREAT.

no engr.

SL. with a cinereous ground; the head reticulated with black; on the back three pale lines and four duſky; the laſt ſpotted with black.

Theſe vary; at times, part is of an amber color. The largeſt of the genus, five inches long.

L. *Lin. Syſt.* 1082.
Limax cinereus parvus immaculatus. *Liſt. Angl.* 130.

Agreſtis.
19. FEILD.

no engr.

SL. ſmall, and of an uniform cinereous color; are very common in gardens, and deſtructive to plants.

Theſe have ſometimes been ſwallowed by perſons in a conſumptive habit, who thought them of ſervice.

L. *Lin. Syſt.* 1082. *Faun. Suec. No.* 2092.

Flavus.
20. YELLOW.

no engr.

SL. of an amber color, marked with white.

IX. Body

LAPLYSIA. IX. Body covered with membranes reflected.
A ſhield-like membrane on the back.
A lateral pore on the right ſide.
The vent on the extremity of the back.
Four feelers, reſembling ears.

Depilans.
21. Depilatory.

Lepus marinus. *Plinii, lib.* ix. *c.* 48. *Rondel. piſc.* 520.
Lernæa. *Bohadſch.* 3. *tab.* i. *fig.*
Laplyſia. *Lin. Syſt.* 1082.

Deſcribed in the character. The ſpecimen engraven ſhews its ſize. Thoſe of *Italy* grow to the length of eight inches. *Pliny* calls it *offa informis*, and placing it among the venomous marine animals, ſays, that even the touch is infectious. The ſmell is extremely nauſeous. *Tab.* xxi. *fig.* 21.

Taken off *Angleſea.*

X. Body oblong, flat beneath; creeping. *DORIS.*
Mouth placed below.
Vent behind; ſurrounded with a fringe.
Two feelers, retractile.

Doris. *Lin. Syſt.* 1083. *Bohadſch. tab.* v. *fig.* 4. 5. *Argo.* 22. LEMON.

D. with an oval body, convex, marked with numerous punctures; of a lemon color; the vent beſet with elegant ramifications.

Inhabits different parts of our ſeas; called, about *Brighthelmſtone*, the *ſea-lemon*. *Tab.* xxii. *fig.* 22.

Doris. *Lin. Syſt.* 1083. *Verrucoſa.* 23. WARTY.

D. of an ovated form, convex, tuberculated. *Tab.* xxi. *fig.* 23.

Inhabits the ſea, near *Aberdeen*.

D. with the front abrupt; body has the appearance of a ſnail; bilamellated; ſize of the figure; amber colored. *Electrina.* 24. AMBER.

Taken off *Angleſea*. *Tab.* xxiv. *fig.* 24.

APHRODITA. XI. Body oval; numbers of faſciculi, ſerving the uſes of feet, on each ſide.

Mouth cylindric, retractile, placed at the extremity.

Two ſetaceous feelers.

Aculeata. 25. ACULEATED.

APH. *Lin. Syſt.* 1084. *Faun. Suec. No.* 2099. *Baſter*, ii. 62. *tab.* vi. *fig.* 12.
Muſ. Ad. Fr. i. 93.
Eruca marina. *Seb. Muſ.* i. *tab.* xc. 1. 111. *tab.* iv. *f.* 7. 8.
Sea mouſe. *Dale's Harwich.* 394. *Boate's Nat. Hiſt. Ireland*, 172.

APH. with the back cloathed with ſhort brown fur; the ſides, with rich pavonaceous green hairs, mixed with ſharp ſpines; vent covered with two ſcales; belly covered with a naked ſkin; mouth placed beneath; each foot conſiſts of a *faſciculus* of five or ſix ſtrong ſpines; on each ſide about thirty-ſix; grows to the length of between four and five inches. *Tab.* xxiii. *fig.* 25.

Inhabits all our ſeas; often found in the belly of the cod-fiſh.

Squammata. 26. SCALED.

APH. *Lin. Syſt.* 1084. *Baſter*, ii. 66. *tab.* vi. *fig.* 5.

APH. with the back covered with two rows of large ſcales, deciduous; about an inch long.

Taken off *Angleſea*.
Tab. xxiii. *fig.* 26.

Pedunculata.
27. PEDUNCULATED.

APH. with two rows of ſcales on the back, placed alternately; the mouth cylindric, projecting; an inch long.

Taken off *Brighthelmſtone*. *Tab.* xxiv. *fig.* 27.

Annulata.
28. ANNULATED.

APH. oblong; fuſiform; annulated; ſmooth, excepting a row of minute ſpines, one on each ring, running along the back; feet ſmall; ſize two inches and a quarter; of a pale yellow color.

Tab. xxiv. *fig.* 28.

Minuta.
29. LITTLE.

APH. Lepidota. *Pallaſ. Miſcel. Zool.* 209. *tab.* viii. *fig.* 1. 2. vii. 15.

APH. with ſmall ſcales; ſlender; not an inch long.

Taken off *Angleſea*. *Tab.* xxiv. *fig.* 29.

NEREIS. XII. Oblong ſlender body.
Feet formed like a pencil of rays, and numerous on each ſide.
Mouth at the extremity, unguiculated.
Feathered feelers above the mouth.

Noctiluca. N. Segmentis xxiii. corpore vix conſpicuo. *Lin. Syſt.* 1085.
30. Noctilucous. Noctiluca marina. *Amæn. Acad.*
Baſter, i. *tab.* iv. *fig.* 3.

no engr.

Theſe are the animals that illuminate the ſea, like glow-worms, but with brighter ſplendor. I have at night, in rowing, ſeen the whole element as if on fire round me; every oar ſpangled with them; and the water burnt with more than ordinary brightneſs. I have taken up ſome of the water in a bucket, ſeen them for a ſhort ſpace illuminate it; but when I came to ſearch for them, their extreme ſmallneſs eluded my examination.

Lacuſtris. Nereis. *Lin. Syſt.* 1085.
31. Bog. *Ræſel. inſect. Polyp. tab.* lxxix.

no engr.

N. with a linear jointed body, with a filiform foot iſſuing from each; the whole animal of the ſize of a ſhort briſtle of a hog; an object of the microſcope.

Inhabits wet places.

Nereis

Mr Carlisle has ſeen it in ſea water. Mrs Knapp ſaid she found it at night on ſea weeds

ſee Wesley II. 99.

Linnæus has a diſsertation on it. 1752. 4° Upſal. ſee catal. diſsert. } p. 139. 4° }

Nereis. *Lin. Syſt.* 1086. *Faun. Suec. No.* 2095. *Cærulea.* 32. BLUE.

N. ſmooth; depreſſed; with 184 ſegments of a bluiſh-green color, ſemi-pellucid; a longitudinal *ſulcus* runs along the belly, about four inches long.

Inhabits the deeps. Two figures are given, *fig.* 1. on its belly, 2. on its back, ſhewing the *ſulcus.*

N. with a very ſlender depreſſed body; two black ſpots on the front; attenuated at the end when it draws in its forceps; a blood-red longitudinal line along the middle of the back; the ſegments very numerous; about four inches long. *Rufa.* 33. RED.

Taken off *Angleſea.* *Tab.* XXV. *fig.* 33.

Nereis. *Pallaſ. Miſc. p.* 131. *tab.* ix. *fig.* 17. *Conchilega.* 34. SHELL.

no engr.

N. with a flat body, attenuated towards the tail; pellucid; about thirteen feet on each ſide; about the mouth a ſeries of very fine filaments.

Inhabits the SABELLA *Tubiformis.* No. 163. of this work.

ASCIDIA. XIII. Body fixed to a ſhell, rock, &c.
Two apertures, one on the ſummit.
The other lower, forming a ſheath.

Ruſtica? 35. RUSTIC. Aſc. *Lin. Syſt.* 1087.

Asc. with ſcabrous extremities; one end bending upwards; middle part ſmooth; lower flat; of a brown color.

Taken off *Scarborough*. Animals of this genus have the faculty of ſquirting out the water they take in. *Tab.* xxiii. *fig.* 35.

ACTINIA. XIV. Body oblong, round, affixing itſelf to ſome other ſubſtance.
The top dilatable, ſurrounded within with numberleſs *tentacula*.
Mouth the only aperture; furniſhed with crooked teeth.

Sulcata. 36. SULCATED. HYDRA tentaculis denudatis, numeroſiſſimis, corpore longitudinaliter ſulcato. *Gaertner, Ph. Tr.* 1761. *p.* 75. *tab.* i. *b. fig.* 1. A. B.

no engr.

Ac. with a body marked with trifurcated ſulci; and ſummit ſurrounded with long ſlender *tentacula*,

from

from 120 to 200 in number; color of the body pale cheſnut; of the tentacula a ſea-green, varied with purple.

Inhabits the rocks of the *Corniſh* and *Angleſea* ſeas.

Pedunculata.
37. **STALKY.**
no engr.

HYDRA calyciflora, tentaculis retractilibus variegatis corpore verrucoſo. *Ibid. fig.* 2. A. B. C.

Ac. with a long cylindric ſtalk, expanding at top, and tuberculated. The *tentacula* diſpoſed in ſeveral ranges, ſhort, and when open, form a radiated angular circumference, like a beautiful flower, with a ſmooth polygonal diſc; the color of the ſtalk, a fine red; of the *tentacula* varied with ſeveral colors. This ſpecies is retractile.

Inhabits *Cornwall.*

Verrucoſa.
38. **STUDDED.**
no engr.

HYDRA diſciflora, tentaculis retractilibus ſubdiaphanis; corpore cylindrico, miliaribus glandulis longitudinalitèr ſtriato. *Ibid. fig.* 4. A. B.

Ac. with a long cylindric ſtalk; marked with elegant ſmall tubercles, diſpoſed in ſtrait lines from top to bottom; the circumference of the mouth ſtriated, ſurrounded with ſhort petals, like thoſe of the ſun-flower; and thoſe again with white *tentacula*, barred with brown. When drawn in, it aſſumes the form of a bell; and the lines of tubercles converge to the central of the ſummit. Body of a pale red.

Inhabits *Cornwall.*

Hemiſpherica.
39. BUTTON.

HYDRA diſciflora, tentaculis retractilibus, extimo diſci margine tuberculato. *Ibid. fig.* 5. A. B.

no engr.

Ac. with a ſmooth ſhort thick ſtalk; the edge of the diſc ſurrounded with a ſingle row of tubercles; the *tentacula* numerous and ſlender. Color a dull crimſon. Retractile, and flings itſelf in that ſtate into the form of a conoid button.

Inhabits moſt of our rocky ſhores.

Pentapetala.
40. CINQUEFOIL.

ACTINIA dianthus. ELLIS. *Ph. Tr.* 1767. *p.* 436. *tab.* xix. *f.* 8.

no engr.

Ac. with a circular contracted mouth; the diſc divided into five lobes, covered with ſeveral ſeries of ſhort ſubulated *tentacula*. Stalk ſhort and thick. When contracted, aſſumes the form of a long white fig.

Inhabits the rocks near *Haſtings.* SUSSEX.

XV. Body not affixed; naked; gibbous. *HOLOTHURIA.*
Many *tentacula* at one extremity, ſurrounding the mouth.

HOL. *Lin. Syſt.* 1091. *Pentactes.*
Hydra corolliflora tentaculis retractilibus frondoſis. *Gaertner. Ph. Tr.* 1761. *p.* 75. *tab.* i. *b. fig.* 3. A. B. 41. FIVE-ROWED.

H. with an incurvated cylindric body, marked with longitudinal rows of *papillæ*; out of the centre of each iſſue, at will, ſlender feelers like the horns of ſnails; the upper extremity retractile; when exerted, aſſumes a cordated form, ſurrounded at the apex with eight tentacula, elegantly ramified, of a yellow and ſilver color.

Found on the ſhore between *Penſance* and *Newland.* Suppoſed to inhabit the deep.

The figure engraven to illuſtrate this genus was dredged up near *Weymouth. Tab.* xxvi. *fig.* 41.

Ariſtotle and *Pliny* make uſe of the words Ολοϑούϱια and *Holothuria* *; but I ſhould imagine, from the context, that they intend thoſe marine bodies, which modern naturaliſts ſtyle *Zoophyta*, perhaps *Alcyonia:* for both of the former make them analogous with plants. Yet *Ariſtotle* hints that they have life; a diſcovery aſſumed in later times.

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* *Ariſtot. Hiſt. An. lib.* i. *c.* 1. *de Part. An. lib.* iv. *c.* 5. *Plinii Hiſt. Nat. lib.* ix. *c.* 47.

LERNEA. XVI. Body oblong; roundiſh; which affixes itſelf to other animals by its tentacula.

A thorax heart-ſhaped.

Two, or three tentacula in form of arms.

Salmonea.
42. SALMON. L. *Lin. Syſt.* 1093. *Faun. Suec. No.* 2102.

L. with an ovated body, cordated thorax, and two linear arms approaching nearly to each other.

Inhabits the gills of ſalmon. Obſerved in great numbers on the firſt arrival of that fiſh out of the ſea; but after being a little time in freſh waters, drops off and dies. The ſalmon is reckoned in higheſt ſeaſon when theſe *vermes* are found in them. Called by the fiſhermen, *ſalmon-lice.*

SEPIA.
CUTTLE. XVII. Eight arms placed round the mouth, with ſmall concave diſcs on their inſides.

Often two long *tentacula.*

Mouth, formed like a horny beak.

Eyes, placed beneath the *tentacula.*

Body fleſhy, a ſheath for the breaſt.

A tube at the baſe of the laſt.

Loligo, ſive Calamarus. *Matthiol. in Dioſcorid.* 327.
Loligo magna. *Rondel.* 506.
Le Caſſeron. *Belon. aquat.* 342.
Sepia. *Lin. Syſt.* 1096. *No.* 4. *Seb. Muſ.* iii. *tab.* iv. *fig.* 1, 2. *Faun. Suec. No.* 2107. *Borlaſe Cornwall. tab.* xx. *fig.* 27.

Loligo.
43. GREAT.

S. with ſhort arms and long *tentacula*; the lower part of the body rhomboid and pinnated, the upper thick and cylindric.

Inhabit all our ſeas; are gregarious; ſwift in their motions; take their prey by means of their arms; and embracing it, bring it to their central mouth. Adhere to the rocks, when they wiſh to be quieſcent, by means of the concave diſcs that are placed along their arms. *Tab.* xxvii. *fig.* 43.

Le Pourpre. *Belon. aquat.* 336.
Polypi prima ſpecies. *Rondel.* 513.
Sepia. *Lin. Syſt.* 1045. *No.* 1. *Seb. Muſ.* iii. *tab.* ii. *fig.* 1.

Octopodia.
44. EIGHT-ARMED.

S. with a ſhort round body, without fins or tentacula; with only eight arms; connected at their bottom by a membrane. This is the *Polypus* of *Pliny*, which he diſtinguiſhes from the *Loligo* and *Sepia*, by the want of *tentacula.*[*]

Inhabits our ſeas. In hot climates theſe are found of an enormous ſize. A friend of mine, long reſident among the *Indian* iſles, and a diligent obſerver of nature, informed me that the natives affirm, that ſome have been ſeen two fathoms broad over their centre, and each arm nine fathoms long. When the *Indians* navigate their little boats, they go in dread of them; and leaſt theſe animals ſhould fling their arms over, and ſink them, they never ſail without an ax to cut them off. *Tab.* xxviii. *fig.* 44.

Media. S. *Lin. Syſt.* 1093.
45. MIDDLE. Loligo Parva. *Rondel,* 508. *Seb. Muſ.* iii. *tab.* iv. *fig.* 5.

S. with a long, ſlender, cylindric body; tail finned, pointed, and carinated on each ſide; two long tentacula; the body almoſt tranſparent; green, but convertible into a dirty brown, confirming the remark of *Pliny* *, that they change their color thro' fear, adapting it, *Chameléon* like, to that of the place they are in. The eyes are large and ſmaragdine, *Tab.* xxix. *fig.* 45.

Sepiola. S. *Lin. Syſt.* 1096.
46. SMALL. Sepiola. *Rondel.* 519.

S. with a ſhort body, rounded at the bottom; a round fin on each ſide; two *tentacula.*

Taken off *Flintſhire.* *Tab.* xxix. *fig.* 46.

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* *Lib.* ix. *c.* 29.

La Seiche. *Belon. aquat.* 338. *Matthiol.* in *Dioſcorid.* 326. *Officinalis.*
Sepia. *Rondel.* 498. 47. OFFICINAL.
Seb. Muſ. iii. *tab.* iii. *fig* 1, 2. S. Officinalis. *Lin.*
Syſt. 1095. *Faun. Suec.* No. 2706. *Amœn. Acad.*

no Engr

S. with an ovated body; fins along the whole of the ſides, and almoſt meeting at the bottom; two long tentacula; the body contains the bone, the *cuttle-bone* of the ſhops, which was formerly uſed as an abſorbent.

The bones are frequently flung on all our ſhores; the animal very rarely.

This (in common with the other ſpecies) emits, when frighted or purſued, the black liquor which the antients ſuppoſed darkened the circumambient wave, and concealed it from the enemy.

Σηπία αυτε δολοφροσυνησι, &c.

Th' endanger'd *Cuttle* thus evades his fears,
And native hoards of fluid ſafety bears.
A pitchy ink peculiar glands ſupply,
Whoſe ſhades the ſharpeſt beam of light defy.
Purſu'd he bids the ſable fountains flow,
And wrapt in clouds eludes th' impending foe.
The fiſh retreats unſeen, while ſelf-born night,
With pious ſhade befriends her parent's flight*.

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* *Jones*'s Tranſlation of *Oppian's Halieut. lib.* iii.

The antients ſometimes made uſe of it inſtead of ink. *Perſius* mentions the ſpecies in his deſcription of the noble ſtudent.

Jam liber, et bicolor poſitis membrana capillis,
Inque manus chartæ, nodoſaque venit arundo.
Tum querimur, craſſus calamo quòd pendeat
humor;
Nigra quòd infuſa vaneſcat SEPIA Lympha [*].

At length, his book he ſpreads; his pen he takes:
His papers here, in learned order lays;
And there, his parchment's ſmoother ſide diſplays.
But oh! what croſſes wait on ſtudious men,
The CUTTLE's juice hangs clotted at our pen.
In all my life ſuch ſtuff I never knew,
So gummy thick—Dilute it, it will do.
Nay, now 'tis water! DRYDEN.

This animal was eſteemed a delicacy by the antients; and is eaten even at preſent by the *Italians*. *Rondeletius* gives us two receipts for the dreſſing [†], which may be continued to this day. *Athenæus* [‡] alſo leaves us the method of making an antique Cuttle-fiſh ſauſage; and we learn from *Ariſtotle* [‖], that

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[*] *Sat.* iii. [†] *De Piſc.* 510. [‡] *Lib.* vii. *p.* 326.
[‖] *Lib.* viii. *c.* 30. *Hiſt. An.*

Cuttle fish eaten in Italy & sometimes
stewed in its own black juice
Rose's Italy I. 158

18 ——— 19
19 ——— 20
20 ——— 21
21 ———
22 ——— 23
23 ———
24 ——— 25
25 ——— 26
26 ———

that thoſe animals are in higheſt ſeaſon, when pregnant.

XVIII. Body gelatinous, orbicular, convex above; flat or concave beneath. **MEDUSA.**
Mouth beneath, in the middle.
Tentacula placed below.

BORLASE'*s Cornwall*, p. 256. *tab.* XXV. *fig.* 7, 8. *Fuſca.* 48. **BROWN.**

no engr.

M. with a brown circle in the middle; ſixteen rays of the ſame color pointing from the circumference towards the centre. On the circumference a range of oval tubercles, and crooked fangs placed alternately. Four ragged *tentacula* extend little farther than the body.

BORLASE'*s Cornwall*, p. 257, *tab.* XXV. *fig.* 9, 10. *Purpura.* 49. **PURPLE.**

no engr.

M. with a light-purple croſs in the centre; between each bar of the croſs, is a horſe-ſhoe-ſhaped mark of deep purple; from the circumference diverge certain rays of pale purple. Four thick *tentacula*, ſhort, not extending farther than the body.

Tuberculata.
50. TUBERCLED.

BORLASE's *Cornwall,* p. 257. *tab.* xxv. *fig.* 11, 12.

no engr.

M. with fifteen rays pointing to and meeting at a ſmall ſpot in the centre. Round the edges are ſmall oval tubera; four plain *tentacula* extending far beyond the body.

Undulata.
51. WAVED.

BORLASE's *Cornwall,* p. 257. *tab.* xxv. *fig.* 15.

no engr.

M. with undulated edges, with fangs on the projecting parts; four orifices beneath; between which riſes a ſtem, divided into eight large ragged *tentacula.*

Lunulata.
52. LUNULATED.

BORLASE's *Cornwall, p.* 258. *tab.* xxv. *fig.* 16, 17.

no engr.

M. with the circumference tuberculated on the edges; in the center of the lower part are four conic appendages forming a croſs; ſeveral others, like ſerrated leaves, ſurround it. Eight *tentacula,* not exceeding the edges of the body; eight ſemilunar apertures, one between each *tentaculum.*

Simplex.
53. ARMLESS.

BORLASE's *Cornwall, p.* 257. *tab.* xxv. *fig.* 13, 14.

no engr.

M. with a plain circumference; four apertures beneath; no *tentacula.*

Theſe

In a work cited in Mr. Porden's "Veils" 215 on Medusae
by W. Macartney. —
Some M. thrown out flashes of light in a surprising manner
these always disappeared on the rising of the moon (I
thi? appear merely from the escape of the light.)

Theſe animals inhabit all our ſeas; are gregarious; often ſeen floating with the tide in vaſt numbers; feed on inſects, ſmall fiſh, &c. which they catch with their claſpers or arms. Many ſpecies, on being handled, affect with a nettle-like burning, and excite a redneſs. The antients, and ſome of the moderns, add ſomething more [*]. They were known to the *Greeks* and *Romans* [†], by the names of Πνευμα ϑαλλασσιος, and *Pulmo marinus*, SEA-LUNGS. They attributed medicinal virtues to them. *Dioſcorides* [‡] informs us, that if rubbed freſh on the diſeaſed part, they cured the gout in the feet, and kibed heels. *Ælian* [‖] ſays, that they were depilatory, and if macerated in vinegar, would take away the beard. Their *phoſphorous* quality is well known; nor was it overlooked by the antients. *Pliny* notes, that if rubbed with a ſtick it will appear to burn, and the wood to ſhine all over [§]. The ſame elegant naturaliſt remarks, that when they ſink to the bottom of the ſea, they portend a continuance of bad weather. I muſt not omit, that *Ariſtotle*, and *Athenæus* after him, give to ſome ſpecies the apt name of Κνιδη, or the *nettle*, from their ſtinging quality *.

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[*] Pruritum in pudendis, et uredinem in manibus et oculis movent, atque acrimonia ſua, venerem ſopitam, vel extinctam excitant. *Rondel.* 532. In ſeveral languages they are called by an obſcene name.

[†] *Ariſt. Hiſt. An. lib.* v. *c.* 15. *Dioſcorides* notis *Matthiol.* 341. *Plinii, lib.* ix. *c.* 47.

[‡] *P.* 341.

[‖] *De Animal. lib.* xiii. *c.* 27.

[§] *Lib.* xviii. *c.* 35.

The antients divided their Κνιδη into two claſſes, thoſe that adhered to rocks, the *Actinia* of *Linnæus*; and thoſe that wandered through the whole element. The laſt are called by later writers *Urticæ Solutæ*; by *Linnæus*, *Meduſæ*; by the common people *Sea Gellies* and *Sea Blubbers*.

I do not find that the moderns make any uſe of them. They are left, the prey of baſking ſharks, perhaps of other marine animals.

ASTERIAS. SEA-STAR. XIX. Depreſſed body; covered with a coriaceous coat; furniſhed with five or more rays, and numerous retractile *tentacula*.

Mouth in the center.

* FIVE-RAYED.

Glacialis. 54. COMMON.

no engr

AST. *Lin. Syſt.* 1099. *Faun. Suec. No.* 2113.
Stella coriacea acutangula lutea vulgaris LLUIDII. *Linckii*, *p.* 31. *tab.* xxxvi. *No.* 61.

AST. with five rays depreſſed; broad at the baſe; ſub-angular, hirſute, yellow; on the back, a round ſtriated opercule.

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* *Ariſt. Hiſt. An. lib.* v. *c.* 16. *Athenæus, lib.* iii. *p.* 90.

These

starfish
5 fingers
Taylor's bottom } Guillain 133

The author of "Nature des poissons" says they boil red

F
PAID
1823

Douce Esqr.

ton Square

iddlesex

Theſe are found ſometimes defective, or with only four rays. See *Linckius*, *tab*. xxxv. *fig*. 60.

Common in all our ſeas; feed on oyſters, and are very deſtructive to the beds.

Stella pentapetalos cancellata anomalos.
Linckii, p. 32. *tab*. xiv. *No*. 23. and *tab*. vii. *No*. 9.

Clathrata.
55. **Cancellated.**

no eng:

Ast. with five ſhort thick rays; hirſute beneath; cancellated above.

Found with the former; more rare. *Tab*. xxx. *fig*. 1.

Pentadactyloſaſter oculatus. *Linckii, p*. 31. *tab*. xxxvi. *No*. 62.

Oculata.
56. **Dotted.**

Ast. with five ſmooth rays, dotted or punctured; of a fine purple color.

Angleſea. *Tab*. xxx. *fig*. 56.

Aſtropecten Irregularis. *Linckii, p*. 27. *tab*. vi. *fig*. 13.

Irregularis.
57. **Rimmed.**

no eng:

Ast. with five ſmooth rays; the ſides ſurrounded with a regular ſcaly rim; on the mouth, a plate in form of a cinquefoil; of a reddiſh hue.

Stella

Hiſpida.
58. Hispid.

Stella coriacea acutangula hiſpida. *Linckii, p.* 31. *tab.* ix. *No.* 19.

Ast. with five rays, broad, angulated at top; rough, with ſhort briſtles; brown.

Angleſea. *Tab.* xxx. *fig.* 58.

Gibboſa.
59. Gibbous.

Pentaceros gibbus et plicatus, altera parte concavus. *Linckii, p.* 25. *tab.* iii. *No.* 20.
Borlase's *Cornwall, p.* 260. *tab.* xxv. *fig.* 25, 26.

Ast. with very ſhort broad rays ſlightly projecting; a pentangular ſpecies, much elevated, ſmall, covered with a rough ſkin; brown; the mouth in the midſt of a pentagon.

Placenta.
59. A. Flat.

Stella quinquefida palmipes. *Linckii, p.* 29. *tab.* i. *fig.* 2.
Pontoppidan's Norway, part. ii. 179.

Ast. with five very broad and membranaceous rays, extremely thin and flat.

Tab. xxxi. *fig.* 59. A.

Weymouth. From the Portland cabinet.

Spinoſa.
60. Spiny.

no engr.

Pentadactyloſaſter ſpinoſus regularis. *Linckii, tab.* iv. *No.* 7.
Borlase's *Cornwall, p.* 259. *tab.* xxv. *fig.* 18.

Ast. with five rays of almoſt equal thickneſs, beſet with numerous ſpines.

** FIVE-RAYED, with ſlender or ſerpentiform rays.

Hirſuta, ſeu ſtella grallatoria vel macroſceles LUIDII. *Linckii, p.* 50. *Minuta.* 61. MINUTE.

no engr

AST. with a round body, and five very ſlender and long hirſute rays.

Found by Mr. *Lluyd* near *Tenbigh.*

Stella lacertoſa. *Linckii, p.* 47. *tab.* ii. *No.* 4. *Lacertoſa.* 62. LIZARD.

AST. with five ſmooth ſlender rays, ſcaled, jointed, white. *Linckius* calls this *Lacertoſa*, from the likeneſs of the rays to a Lizard's tail.

Angleſea. Tab. xxxii. *fig.* 62.

AST. with a pentagonal indented body, ſmooth above the aperture; below five-pointed; between the baſe of each ray a ſmall globular bead; the rays ſlender, jointed, taper; hirſute on their ſides. *Sphærulata.* 63. BEADED.

Angleſea. Tab. xxxii. *fig.* 63.

Pentaphylla.
64. CINQUEFOIL.

Borlase's *Cornwall, t.* 260. *tab.* xxv. *fig.* 24.

no engr.

Ast. with the body regularly cinquefoil; rays very ſlender; hirſute on the ſides, teſſulated above and below with green, ſometimes with ſky-blue.

Cornwall.

Varia.
65. PIED.

Borlase's *Cornwall, p.* 259. *tab.* xxv. *fig.* 21.

no engr.

Ast. with a circular body, with ten radiated ſtreaks; the ends of a lozenge form; the rays hirſute, annulated with red.

Cornwall.

Aculeata.
66. RADIATED.

Borlase's *Cornwall, p.* 259. *tab.* xxv. *fig.* 19.

no engr.

Ast. with a round body, with ſtreaks from its centre alternately broad and narrow; the rays ſlender, hirſute.

Cornwall.

Haſtata.
67. JAVELIN.

Borlase's *Cornwall, p.* 259. *tab.* xxv. *fig.* 22.

no engr.

Ast. with a pentagonal body indented; of a deep browniſh-red hue, marked with ten ochraceous ſtreaks; five of the ſtreaks ſlender, with javelin-ſhaped extremities; rays hirſute, jointed.

Cornwall.

BORLASE'*s Cornwall, p.* 259. *tab.* XXV. *fig.* 20.

Fiſſa.
68. INDENTED.
no engr.

AST. with a circular body, with five equidiſtant dents, penetrating deep into the ſides; five light-colored ſtreaks darting from the centre; rays ſlender, hirſute.

Cornwall.

BORLASE'*s Cornwall, p.* 260. *tab.* XXV. *fig.* 23.

Nigra.
69. BLACK.
no engr.

AST. with a pentagonal body, black, with five radiating ſtreaks of white; rays hirſute olivaceous, teſſulated with deeper ſhades.

Cornwall.

⁂ With more than FIVE RAYS.

Stella decacnemos roſacea, ſeu decempeda *Cornubienſium.*
Linckii, p. 55. *tab.* XXXVII. *fig.* 66.

Bifida.
70. BIFID.
no engr.

AST. with ten ſlender rays, beſet with tendrils on their ſides; the mouth ſurrounded with ſhort filiform rays.

Cornwall.

Decacnemos.
71. TEN-RAYED.

Stella decacnemos barbata, ſeu fimbriata, *Barrelier*. *Linckii*, *p*. 55. *tab*. xxxvii. *fig*. 64.

AST. with ten very ſlender rays, with numbers of long beards on the ſides; the body ſmall, ſurrounded beneath with ten ſmall filiform rays.

Inhabits the weſtern coaſts of *Scotland*. *Tab*. xxxiii. *fig*. 71.

Helianthemoides?
72. TWELVE-RAYED.

no engr

Stella dodecactis Helianthemo ſimilis. *Linckii*, *p*. 42. *tab*. xvii. *fig*. 28.

AST. with twelve broad rays finely reticulated, and roughened with faſciculated long papillæ on the upper part; hirſute beneath; red.

Theſe vary into thirteen, ſuch as the *Triſcaidecactis* of *Linckius*. *Tab*. xxxiv. *fig*. 54. I have had one of fourteen rays.

Ariſtotle and *Pliny* * called this genus Αϛηρ, and *ſtella marina*; ſays the firſt, from their reſemblance to the pictured form of the ſtars of heaven. They aſſerted that they were ſo exceedingly hot, as inſtantly to conſume whatſoever they touched.

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* *Ariſtot*. *Hiſt*. *An*. *lib*. v. *c*. 15: *Plinii Hiſt*. *Nat*. *lib*. ix. *c*. 60.

Aſterias caput meduſæ. *Lin. Syſt.* 1101.
Soe-Soele. *Pontop. Norway,* ii. 180.

Arboreſcens.
73. ARBORESCENT.

no engr.

AST. with five rays iſſuing from an angular body; the rays dividing into innumerable branches, growing ſlenderer as they receded from the baſe; the moſt curious of the genus.

Found, as I have been told, in the north of *Scotland.* The late worthy Doctor *William Borlaſe* informed me that it had been taken off *Cornwall.*

XX. Body covered with a ſutured cruſt, often furniſhed with moveable ſpines.
Mouth quinquevalve, placed beneath.

ECHINUS.

Echinus. *Lin. Syſt.* 1102. *Liſt. Angl.* 169. *tab.* iii.
Εχινος ὠά. *Ariſtot. Hiſt. An. lib.* iv. *c.* v.
Tab. xxxiv. *fig.* 74.

Eſculentus.
74. EATABLE.

ECH. of a hæmiſpherical form, covered with ſharp ſtrong ſpines, above half an inch long; commonly of a violet color, moveable; adherent to ſmall tubercles elegantly diſpoſed in rows. Theſe are their inſtruments of motion, by which they change their place.

This ſpecies is often taken in dredging, and often lodges in cavities of rocks juſt within low-water mark.

Are eaten by the poor in many parts of *England*, and by the better ſort abroad. In old times a favorite diſh. They were dreſſed with vinegar, honied wine, or mead, parſley and mint; and eſteemed to agree with the ſtomach *. They are the firſt diſh in the famous ſupper of *Lentulus* †, when he was made *Flamen Martialis*, prieſt of *Mars*. By ſome of the concomitant diſhes, they ſeem deſigned as a whet for the ſecond courſe, to the holy perſonages, prieſts, and veſtals invited on the occaſion. Many ſpecies of ſhell fiſh made part of the feaſt. The reader will perhaps find ſome amuſement in learning the taſte of the *Roman* people of faſhion in theſe articles.

Echini, the ſpecies here deſcribed.

Oſtreæ Crudæ, raw oyſters.

Peloridæ ‡, a ſort of *Mya*, ſtill uſed as a food in ſome places. *Vide No.* 15.

Sphondyli, a ſort of Bivalve, with ſtrong hinges, found in the *Mediterranean* ſea. Not the griſtly part of oyſters, as Doctor *Arbuthnot* conjectures.

Patina Oſtrearum. Perhaps ſtewed oyſters.

Pelorides. Balani nigri et albi; two kinds of *Lepades.*

Sphondyli, again.

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* *Athenæus, lib.* iii. *p.* 91.

† *Macrobius,* as quoted by *Arbuthnot.*

‡ *Rondel. Teſtacea, p.* 11.

Glycymerides *. A ſhell. I ſuſpect to be the ſame with the *Mactra Lutraria* of this work, *No.* 44.

Murices, *Purpuræ*. Turbinated ſhells, whoſe ſpecies I cannot very well determine, there being more than one of each in the *Italian* ſeas.

Echinus ſpatagus. *Lin. Syſt.* 1104. *Liſt. App. tab.* i. *fig.* 13. *Cordatus.*
75. CORDATED.

ECH. of a cordated ſhape, gibbous at one end, and marked with a deep *ſulcus* at the other; covered with ſlender ſpines reſembling briſtles. Shell moſt remarkably fragile.

Length, two inches. *Tab.* xxxiv. *fig.* 75.

Lin. Syſt. 1104. *Argenville*, 310. *tab.* xxv. *fig.* K. *Lacunoſus.*
Rumph. Muſ. tab. xiv. *fig.* 2. 76. OVAL.

ECH. of an oval depreſſed form; on the top of a purple color, marked with a quadrefoil, and the ſpaces between tuberculated in waved rows; the lower ſide ſtudded; and divided by two ſmooth ſpaces.

Length, four inches. When cloathed, is covered with ſhort thickſet briſtles mixed with very long ones.

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* *Rondel. Teſtacea, p.* 13.

Weymouth, from the PORTLAND cabinet. *Tab.* xxxv. *fig.* 76.

Doctor *Borlaſe* gives a figure of an *Echinus*, found in *Mount's Bay*, that reſembles in ſhape the above; but I cannot, either from deſcription or print, determine whether it be the young, or diſtinct. Vide *Nat. Hiſt. Cornwall*, p. 278. *tab.* xxviii. *fig.* 26.

DIV. III. TESTACEA.

VERMES of the ſoft kind, and ſimple make, commonly covered with a calcareous habitation.

DIV. I. MULTIVALVE SHELLS.

I. The animal, or inhabitant of its ſhell, the DORIS. The ſhell plated, conſiſting of many parts, lying upon each other tranſverſely. CHITON.

SECT. I. MULTIVALVE SHELLS.

CH. WITH ſeven valves; thick ſet with ſhort hairs; five-eighths of an inch long. *Crinitus.* 1. HAIRY.

Of the natural ſize. A. 1. magnified.

Inhabits the ſea near *Aberdeen*. *Tab.* xxxvi. *fig.* 1.

CH. with eight valves; with a ſerrated reflected margin, ſmooth; ſize of the figure. *Tab.* xxxvi. *fig.* 2. *Marginatus.* 2. MARGINATED.

Inhabits the ſea near *Scarborough*.

Lævis.
3. SMOOTH.

CH. with eight valves; quite ſmooth, with a longitudinal mark along the back; a little elevated. Size of a wood-louſe. *Tab.* xxxvi. *fig.* 3.

Inhabits the ſhores of *Loch Broom* in *Weſt Roſsſhire.*

The inhabitant of this ſhell is a ſpecies of the *Doris.*

The name *Chiton*, taken from χιτων, *Lorica*, a coat of mail.

LEPAS.
ACORN.

II. Its animal the TRITON.

The ſhell multivalve, unequal, fixed by a ſtem: or ſeſſil.

Balanus.
4. COMMON.

Lepas. *Lin. Syſt.* 1107. *Faun. Suec. No.* 2122.
Common *Engliſh* Barnacle. ELLIS *Ph. Tr.* 1758. *Tab.* xxxiv. *fig.* 17.

L. of a conoid form, ſmooth, and brittle; the lid or *operculum* ſharp pointed.

Found adhering to rocks, oyſters, and ſhell-fiſh of various ſorts. *Tab.* xxxvii. *fig.* 4.

Balanoides.
5. SULCATED.

L. *Lin. Syſt.* 1108. *Faun. Suec. No.* 2123. *Liſt. Angl. tab.* v. *fig.* 41.

L. with ſtrong ſulcated ſhells; aperture ſmaller in proportion than the former.

Adheres to the ſame bodies. *Tab.* xxxvii. *fig.* 5.

Quere, the figure, A. 5. if not an accidental variety?

Lepas Cornubienſis. *Ellis Ph. Tr.* 1758. *tab.* xxxiv. *fig.* 16. *Borlaſe Nat. Hiſt. Cornwall.* *Cornubienſis.* 6. CORNISH.

L. in form of a limpet, with a dilated bottom, and rather narrow aperture; the ſhell ſulcated near the lower edges. *Tab.* xxxvii. *fig.* 6.

L. with the ſhells lapping over each other, and obliquely ſtriated. *Striata.* 7. STRIATED.

The ſea near *Weymouth*. *Tab.* xxxviii. *fig.* 7. From the PORTLAND cabinet.

L. *Lin. Syſt.* 1108. *Tintinnabulum.* 8. BELL. no engr.

L. with a large deep ſhell, rugged on the outſide, of a purple color.

As large as a walnut.

Found frequently adhering to the bottom of ſhips, in great cluſters. Probably originated in hot climates.

L. *Lin.*

Anatifera. 9. Anatiferous. L. *Lin. Syſt.* 1109. *Faun. Suec. No.* 2120. *Liſt. Conch. tab.* 439.

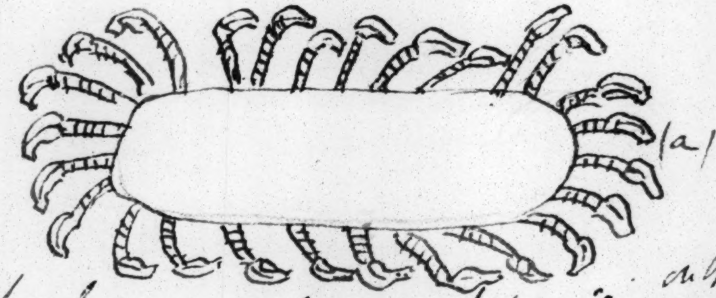
L. conſiſting of five ſhells, depreſſed, affixed to a pedicle, and in cluſters. *Tab.* xxxviii. *fig.* 9.

Adheres to ſhips bottoms by its pedicles.

The *tentacula* from its animal are feathered; and have given our old *Engliſh* hiſtorians and naturaliſts the idea of a bird. They aſcribed the origin of the Barnacle Gooſe to theſe ſhells. The account given by the Sage *Gerard*, is ſo curious, that I beg leave to tranſcribe it.

'But what our eyes have ſeene, and hands have 'touched, we ſhall declare. There is a ſmall 'iſland in *Lancaſhire* called the *Pile* of *Foulders*, 'wherein are found the broken pieces of old 'and bruiſed ſhips, ſome whereof have been caſt 'thither by ſhipwracke, and alſo the trunks and 'bodies with the branches of old and rotten trees, 'caſt up there likewiſe; whereon is found a cer'taine ſpume or froth that in time breedeth unto 'certaine ſhels, in ſhape like thoſe of the Muſkle, 'but ſharper pointed, and of a whitiſh colour; 'wherein is contained a thing in form like a lace 'of ſilke finely woven as it were together, of a 'whitiſh colour; one end whereof is faſtened unto 'the inſide of the ſhell, even as the fiſh of Oiſters 'and Muſkles are: the other end is made faſt

'unto



a marine lump, 4 feet long covered all over with pedicles, ~~at the extremities of which~~ on the surface of which in every part were white bivalve shells. Cast on the shore at Margate at the beg. of Feb-y 1818 & exhibited at Charing cross as "a living (ill named so) marine animal with so many heads that they are incalculable each of which is formed of shell like the finest China, each head connected to the body by a flexible semitransparent neck".

It was kept in a tub of sea water the part (a) only appearing, the rest being as I thought purposely concealed though the keeper said it was the same as the other. It was impossible to ascertain what the substance of the body was, unless perhaps from the concealed part. Could it be merely a log of ship timber to which a parcel of Lepases had attached themselves, as I suspect it was.

I cannot get at the fact whether the Barnacle goose
was thought of the old credulous writers to proceed
from the Barnacle shell
or the Lepas

Where is this described?

Barnacle is omitted in
Pennant

‘ unto the belly of a rude maſſe or lumpe, which ‘ in time commeth to the ſhape and form of a ‘ bird: when it is perfectly formed, the ſhell ‘ gapeth open, and the firſt thing that appeareth ‘ is the foreſaid lace or ſtring; next come the legs ‘ of the bird hanging out, and as it groweth ‘ greater it openeth the ſhell by degrees, till at ‘ length it is all come forth, and hangeth onely by ‘ the bill: in ſhort ſpace after it commeth to full ‘ maturitie, and falleth into the ſea, where it gathereth feathers, and groweth to fowle bigger ‘ than a Mallard and leſſer than a Gooſe, having ‘ blacke legs and bill or beake, and feathers blacke ‘ and white, ſpotted in ſuch manner as is our *Mag-Pie*, called in ſome places a *Pie-Annet*, which ‘ the people of *Lancaſhire* call by no other name ‘ than a tree Gooſe: which place aforeſaid, and ‘ all thoſe parts adjoyning, do ſo much abound ‘ therewith, that one of the beſt is bought for three ‘ pence. For the truth hereof, if any doubt, may ‘ it pleaſe them to repaire unto me, and I ſhall ‘ ſatisfie them by the teſtimonie of good witneſſes.’ *Vide* HERBAL, p. 1587, 1588.

This genus is called by *Linnæus*, LEPAS, a name that is given by the antients to the *Patella*. Shells of this claſs are called by *Ariſtotle*, Βαλανοι *, from the reſemblance ſome of them bear to acorns. We have ſeen before, in the account of the ſupper

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* *Hiſt. An. lib.* v. *c.* 15.

of *Lentulus*, that they were admitted to the greateſt tables.

PHOLAS. III. Its animal an ASCIDIA.

Shell bivalve, opening wide at each end, with ſeveral leſſer ſhells at the hinge.

The hinges folded back, united with a cartilage.

An incurvated tooth in the inſide beneath the hinge.

Dactylus. 10. DACTYLE. PH. *Lin. Syſt.* 1110. *Faun. Suec. No.* 2124. *Liſt. Angl. App. Tab.* xi. *fig.* 3.

PH. with an oblong ſhell, marked with echinated *ſtriæ*; the tooth broad; the ſpace above the hinge reflected, and cancellated beneath; breadth four inches and a half; length one and a quarter. *Tab.* xxxix. *fig.* 10.

Candidus. 11. WHITE. PH. *Lin. Syſt.* 1111. *Liſt. Angl. tab.* v. *fig.* 39.

PH. with a brittle ſhell, and ſmoother than the former; the tooth very ſlender; breadth an inch and an half; length near an inch. *Tab.* xxxix. *fig.* 11.

PH. *Lin. Syſt.* 1111. *Liſt. Angl. tab.* v. *fig.* 38. *Criſpatus.*
Faun. Suec. No. 2125. 12. CURLED.

PH. with a ſtrong oval ſhell; the half next to the hinge waved and ſtriated; tooth large and ſtrong; breadth three inches and a half; length one and three quarters. *Tab.* xl. *fig.* 12.

This genus takes its name from φωλεω, to lurk in cavities. A ſhell of the name of *Pholis* and *Pholas*, is mentioned by *Ariſtotle* and *Athenæus*; but I ſuſpect it to be the *Dactylus* of *Pliny*. A ſpecies now called *Datyl*, abounding within the rocks of the *Mediterranean*, is much admired as a food *.

PH. with a ſhell thinner than the former; and the tooth very ſlender and oblique; in externals reſembling the former, only never found larger than a hazel nut. *Parvus.* 13. LITTLE.

I have often taken them out of the cells they had formed in hard clay, below high-water mark, on many of our ſhores. They alſo perforate the hardeſt oak plank that accidentally is lodged in the water. I have a piece filled with them, which was found near *Penſacola* in *Weſt Florida*, and preſented to me by that ingenious naturaliſt the late JOHN ELLIS, Eſquire.

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* *Pliny, lib.* ix. *c.* 61. *Armſtrong's Hiſt. Minorca,* 173.

I have alſo found them in maſſes of foſſil wood, in the ſhores of *Abergelli* in *Denbighſhire.* The bottom of the cells are round, and appear as if nicely turned with ſome inſtrument.

Tab. xl. *fig.* 13.

DIV. II. BIVALVE SHELLS.

MYA. GAPER. IV. Its animal an ASCIDIA.

A bivalve ſhell gaping at one end.

The hinge, for the moſt part, furniſhed with a thick, ſtrong, and broad tooth, not inſerted into the oppoſite valve.

Truncata. 14. ABRUPT. M. Truncata. *Lin. Syſt.* 1112. *Faun. Suec. No.* 2126. *Liſt. Angl. tab.* v. *fig.* 36.

M. WITH a broad, upright, blunt tooth, in one ſhell; the cloſed end rounded; the open end truncated, and gaping greatly; the outſide yellow, marked with concentric wrinkles. *Tab.* xli. *fig.* 14.

Lodged under ſlutchy ground, near low-water mark; diſcovered by an aperture in the ſlutch, beneath which it is found in coarſe gravel.

M. with

Declivis. 15. SLOPING. no engr.

M. with a brittle half-tranſparent ſhell, with a hinge ſlightly prominent; leſs gaping than the *truncata*; near the open end ſloping downwards.

Frequent about the *Hebrides*; the fiſh eaten by the gentry.

Arenaria. 16. SAND.

M. Arenaria. *Lin. Syſt.* 1112, *Faun. Suec. No.* 2127.

M. with a tooth like the former; mouth large, rough at the baſe; the whole ſhell of an ovated figure, and much narrower at the gaping end.

Three inches and a half broad; two inches long in the middle. *Tab.* xlii.

Pictorum. 17. PAINTERS.

M. Pictorum. *Lin. Syſt.* 1112. *Faun. Suec. No.* 219. *Liſt. Angl. App. tab.* i. *fig.* 4.

M. with an oval brittle ſhell; with a ſingle longitudinal tooth like a lamina in one ſhell, and two in the other. *Tab.* xliii. *fig.* 17.

Breadth a little above two inches; length one.

Inhabits rivers.

Uſed to put water-colors in; whence the name. Otters feed on this and the other freſh-water ſhells.

Lin.

Margaritifera. *Lin. Syſt.* 1112. *Faun. Suec. No.* 2130. *Liſt. Angl. App. tab.* i. *fig.* 1.
18. **PEARL.** *Scheffer Lapland,* 145.

M. with a very thick coarſe opake ſhell; often much decorticated; oblong, bending inward on one ſide; or arcuated; black on the outſide; uſual breadth from five to ſix inches; length two and a quarter. *Tab.* xliii. *fig.* 18.

Inhabits great rivers, eſpecially thoſe which water the mountanous parts of *Great Britain.*

This ſhell is noted for producing quantities of pearl. There have been regular fiſheries for the ſake of this pretious article in ſeveral of our rivers. Sixteen have been found within one ſhell. They are the diſeaſe of the fiſh, analogous to the ſtone in the human body. On being ſqueezed, they will eject the pearl, and often caſt it ſpontaneouſly in the ſand of the ſtream.

The *Conway* was noted for them in the days of *Cambden.* A notion alſo prevales, that Sir *Richard Wynne*, of *Gwydir*, chamberlain to *Catharine* queen to *Charles* II. preſented her majeſty with a pearl (taken in this river) which is to this day honored with a place in the regal crown. They are called by the *Welſh Cregin Diluw*, or Deluge Shells, as if left there by the flood.

The *Irt* in *Cumberland* was alſo productive of them. The famous circumnavigator, Sir *John*

Mother of pearl is called
Margery pearle in Palsgrave

Woodward

Hawkins [*], had a patent for fiſhing that river. He had obſerved pearls plentiful in the Straits of *Magellan*, and flattered himſelf with being inriched by procuring them within his own iſland.

In the laſt century, ſeveral of great ſize were gotten in the rivers of the county of *Tyrone* and *Donegal*, in *Ireland*. One that weighed 36 *carats* was valued at £. 40, but being foul, loſt much of its worth. Other ſingle pearls were ſold for £. 4. 10 *s.* and even for £. 10. The laſt was ſold a ſecond time to Lady *Glenlealy*, who put it into a necklace, and refuſed £. 80 for it from the Ducheſs of *Ormond* [†].

Suetonius reports, that *Cæſar* was induced to undertake his *Britiſh* expedition for the ſake of our pearls; and that they were ſo large that it was neceſſary to uſe the hand to try the weight of a ſingle one [‡]. I imagine that *Cæſar* only heard this by report; and that the cryſtalline balls in old leaſes, called *mineral pearl*, were miſtaken for them [||].

We believe that *Cæſar* was diſappointed of his hope: yet we are told that he brought home a buckler made with *Britiſh* pearl [§], which he dedicated to, and hung up in the temple of *Venus Genetrix*. A proper offering to the Goddeſs of Beauty, who ſprung from the ſea. I cannot omit

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[*] *Camden.* ii. 1003.

[†] *Ph. Tr. Abridg.* ii. 831.

[‡] *Sueton. Vit. Jul. Cæſ. c.* xliv.

[||] *Woodward's Method of Foſſils,* 29. *part* ii.

[§] *Plinii, lib.* ix. *c.* 35. *Tacitus Vit. Agricolæ.*

mentioning,

mentioning, that notwithſtanding the claſſics honor our pearl with their notice, yet they report them to have been ſmall and ill colored; an imputation that in general they are ſtill liable to. *Pliny* * ſays, that a red ſmall kind was found about the *Thracian Boſphorus*, in a ſhell called *Mya*, but does not give it any mark to aſcertain the ſpecies.

Dubia. 19. DUBIOUS. M. with a rudiment of a tooth within one ſhell; with an oval and large hiatus oppoſite to the hinge. Shells brown and brittle.

Shape of a *piſtachia* nut.

Length of a horſe-bean. *Tab.* xliv.

Found near *Weymouth*. From the PORTLAND cabinet.

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* *Plinii, lib.* ix. *c.* 35.

V. Its animal an ASCIDIA. **SOLEN. RAZOR.**

A bivalve; oblong; open at both ends.

At the hinge, a ſubulated tooth turned back, often double; not inſerted in the oppoſite ſhell.

* With the hinge near the end.

Lin. Syſt. 1113. *Faun. Suec. No.* 2131. *Liſt. Angl. tab.* v. *fig.* 37. *Liſt. Conch. tab.* 409. *Siliqua.* 20. POD.

S. with a ſtrait ſhell, equally broad, compreſſed, with a double tooth at the hinge, receiving another oppoſite; and on one ſide another tooth ſharp pointed, and directed downwards. Color olive, with a conoid mark of an aſh color, dividing the ſhells diagonally; one part ſtriated lengthways, the other tranſverſely. Breadth uſually five or ſix inches, ſometimes nine.

Tab. xlv. *fig.* 20.

Lin. Syſt. 1113. *Liſt. Conch. tab.* 410. *Vagina.* 21. SHEATH.

S. with a ſhell nearly cylindrical, one end marginated; the hinge conſiſting of a ſingle tooth in each ſhell placed oppoſite. Shell yellow, marked much like the former; uſually about five or ſix inches broad.

Inhabits *Red Wharf*, *Angleſea*.

Enſis.
22. SCYMETER.

Lin. Syſt. 1114. *Liſt. Angl. App. tab.* ii. *fig.* 9. *Liſt. Conch. tab.* 411.

S. with a ſhell bending like a ſcymeter, with hinges like thoſe of the *Siliqua*; and colored and marked like it. The ſhell thin, and rounded at each end. Uſual breadth four or five inches. *Tab.* xlv. *fig.* 22.

Pellucidus.
23. PELLUCID.

S. ſub-arcuated and ſub-oval; with the hinge conſiſting of a ſharp double tooth on one ſide, receiving a ſingle one from the oppoſite, with a proceſs in each ſhell, pointing towards the cartilage of the hinge. Shell fragile, pellucid; about an inch broad. *Tab.* xlvi. *fig.* 23.

Inhabits *Red Wharf*, *Angleſea*.

** With the hinge near the middle.

Legumen.
24. SUB-OVAL.

Lin. Syſt. 1114. *Liſt. Conch. tab.* 420.

S. with a ſtrait ſub-oval ſhell; with teeth exactly reſembling thoſe of the laſt, furniſhed likewiſe with ſimilar proceſſes; one end is ſomewhat broader than the other. Uſual breadth about two inches and an half. Shell ſub-pellucid, radiated from the hinge to the margin.

Tab. xlvi. *fig.* 24.

Inhabits the ſame place.

Lin. Syſt. 1114. *No.* 37. *Liſt. Conch.* 421.

Cultellus.
25. KIDNEY.

S. with a kidney-ſhaped ſhell; with a ſingle tooth in both ſides of the hinge. The ſhell covered with a rough *epidermis*. Breadth near two inches; length ſeven-eighths of an inch.

Inhabits the ſea near *Weymouth*.

Tab. xlvi. *fig.* 25.

This ſpecies borders on the *myæ*, and connects the *genera*.

I am not acquainted with the natural hiſtory of the two laſt. The three firſt lurk in the ſand near low-water mark, in a perpendicular direction: and when in want of food, elevate one end a little above the ſurface, and protrude their bodies far out of the ſhell. At approach of danger, they dart deep into the ſand, ſometimes at leſt two feet. Their place is known by a ſmall dimple on the ſurface. Sometimes they are dug out of the ſand with a ſhovel; at other times are taken by a bearded dart ſuddenly ſtruck into them. They were uſed as a food by the antients. *Athenæus* * (from *Sophron*) ſpeaks of them as great delicacies, and particularly grateful to widows.

> Μακραὶ κόγχαι σῶλενες τοῦτιγα
> Γλυκυκρεων κογχύλιον χηρᾶν γυναικῶν λιγχνεῦμα.
> Oblongæ conchæ *ſolenes*, et carne jucundâ
> Conchylium, viduarum mulierum cupediæ.

Theſe are often uſed as a food at preſent; and brought up to table fried in eggs.

TELLINA. VI. Its animal a TETHYS.

A bivalve, generally ſloping down on one ſide.
Three teeth at the hinge.

* Ovated.

Fragilis.
26. FRAGILE.

Lin. Syſt. 1117. *No.* 49.

T. with a very brittle white ſhell, truncated at the narrower, and rounded at the broader end. An inch broad.

Tab. xlvii. *fig.* 26.

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* *Lib.* iii. *p.* 86.

T. with a very thick depreſſed oblong ſhell; white; with concentric *ſtriæ*. *Depreſſa.* 27. DEPRESSED.

Tab. xlvii. *fig.* 27.

T. with very thick, broad, and depreſſed ſhells, marked with numerous concentric *ſtriæ*. Breadth, an inch and three quarters; length, an inch and a quarter. *Craſſa.* 28. FLAT.

Has the habit of the VENUS *borealis*; but the ſides of this are unequal, one being more extended than the other.

Tab. xlviii. *fig.* 28.

Lin. Syſt. 1117. *No.* 52. *Planata.* 29. PLAIN.

T. with a very flat delicate ſhell, marked with concentric lines of red; the ſpace about the hinge brown. Breadth, two-thirds of an inch.

Tab. xlviii. *fig.* 29.

Lin. Syſt. 1117. *No.* 54. *Radiata.* 30. RAYED.

T. with very convex ſhells of a faint aſh color, radiated with red; tinged within with a faint purple. Breadth an inch and an half.

Tab. xlix. *fig.* 30.

Incarnata.
31. CARNATION.

Lin. Syſt. 1118. *No.* 58. *Faun. Suec. No.* 2133. *Liſt. Angl. App. tab.* 1. *fig.* 8.

T. oblong, depreſſed; originally covered with a thick brown *epidermis.* When naked, of a whitiſh color rayed with red, and croſſed again with minute concentric *ſtriæ.*

Uſual breadth, one inch and three quarters.

Tab. xlvii. *fig.* 31.

Carnaria.
32. FLESH-COLORED.

Lin. Syſt. 1119. *No.* 66. *Liſt. Angl. tab.* iv. *fig.* 25.

T. with a ſtrong and rounded ſhell, generally of a bloom color within and without; externally marked with belts of deeper red.

Breadth about ſeven-eighths of an inch.

Sometimes found quite white, as *fig.* 32. A.

Tab. xlix. *fig.* 32.

Trifaſciata.
33. TRI-FASCIATED.

Lin. Syſt. 1119. *No.* 58.

no engr.

T. with a very brittle ſhell, radiated like the T. *Incarnata*; but leſſer.

Rugoſa.
34. RUGGED.

T. with oval ſhells, marked with rugged concentric *ſtriæ.* This has much the habit of the *Mytilus Lithophagus.*

About the ſize of a filbert.

Dredged up at *Weymouth*. Miſplaced among the Venuses. *Vide tab.* lvii. *fig.* 34.

Borlaſe Hiſt. Cornwall, tab. xxviii. *fig.* 23. *Cornubienſis.* 35. Cornish.

no engr

T. with oblong oval ſhells, deeply ſtriated parallel to the margin.

Deſcribed by Doctor *Borlaſe*.

Lin. Syſt. 1120. *No.* 72. *Faun. Suec. No.* 2138. *Liſt. Angl. App. tab.* i. *fig.* 5. *Cornea.* 36. Horny.

T. with round ſhells very convex, marked with a tranſverſe furrow; color brown.

Size of a pea.

Inhabits ponds and freſh waters.

Tab. xlix. *fig.* 36.

VII. Bivalve, nearly equilateral, equivalve. *CARDIUM.* COCKLE.

Its animal a Tethys.

Two teeth near the beak: a larger (placed remote) on each ſide; each locking into the oppoſite.

Aculeatum. 37. ACULEATED. *Lin. Syſt.* 1122. *No.* 78.

C. with high ribs radiating from the hinge to the edges; each rib ſulcated in the middle; and near the circumference beſet with large and ſtrong proceſſes, hollowed. One ſide of the ſhell projects further than the other, and forms an angle. Color yellowiſh-brown.

As large as a fiſt. The marginal circumference ten inches and a half.

Found off the *Hebrides* and *Orknies*.

Tab. l. *fig.* 37.

Echinatum. 38. ECHINATED. *Lin. Syſt.* 1122. *No.* 79. *Faun. Suec. No.* 2139. *Liſt. Angl. tab.* v. *fig.* 33. *Conch. tab.* 324.

no engr.

C. leſſer than the former, being little more than ſix inches in circumference; the color white; the ribs echinated higher up; has only ſixteen ribs, the former twenty-one; the ſhape rounder.

Found dead on many of our ſhores.

Ciliare. 39. FRINGED. *Lin. Syſt.* 1122. *No.* 80.

C. with a very brittle ſhell, and delicate; of a pure white; eighteen ribs riſing into thinner ſpines.

Of the ſize of a hazel nut.

Tab. l. *fig.* 39.

Lin. Syſt. 1123. *No.* 88. *Lævigatum.*
40. SMOOTH.

C. of a ſub-oval ſhape, ſomewhat depreſſed; of a deep brown color, with obſolete longitudinal *ſtriæ*; and a few tranſverſal, concealed by a thin *epidermis.*

Circumference ſix inches and a half.

Tab. li. *fig.* 40.

Lin. Syſt. 1124. *No.* 90. *Faun. Suec. No.* 2141. *Liſt. Angl. tab.* v. *fig.* 34. *Edule.*
41. EDIBLE.

C. with twenty-eight depreſſed ribs, tranſverſely ſtriated; one ſide more ſalient than the other.

Common on all ſandy coaſts, lodged a little beneath the ſand; their place marked by a depreſſed ſpot. Delicious and wholeſome food.

Tab. l. *fig.* 41.

VIII. Its animal a TETHYS. *MACTRA.*

Bivalve, unequal ſided, equivalve.

Middle tooth complicated; with a little concavity on each ſide; the lateral teeth remote, mutually received into each other.

Lin.

Stultorum. 42. SIMPLETON'S. *Lin. Syſt.* 1126. *No.* 99.

M. with ſemi-tranſparent ſhells, ſmooth, gloſſy; white without; purpliſh within.

Size of a hazel nut.

Tab. lii. *fig.* 42.

Solida. 43. STRONG. *Lin. Syſt.* 1126. *No.* 100. *Faun. Suec. No.* 2140. *Liſt. Angl. tab.* iv. *fig.* 24.

M. with very ſtrong ſhells; in a live ſtate, ſmooth, white, gloſſy, and marked with a few tranſverſe *ſtriæ*. In dead ſhells, the *ſtriæ* appear like high ribs. *Vide fig.* 43. A. *Tab.* l.

Lutraria. 44. LARGE. *Lin. Syſt.* 1126. *No.* 101. *Faun. Suec. No.* 2128. *Liſt. Angl. tab.* iv. *fig.* 19.

M. with an oblong thin ſhell; one ſide much extended, and gaping; for which reaſon *Linnæus* once placed it among the *Myæ*.

Breadth five inches; length two and a half.

Inhabits the ſea near the mouth of rivers; and even ſometimes within the mouth.

Tab. lii. *fig.* 44.

The white bone of the cuttle fish is used
by stationers to pounce parchment.
It serves also for canary-birds to peck
at.

Zeecat, i.e. seacat, in Dutch
Morcadour, in British.

The [illegible] of the nautilus unknown.
One of the parasites that take their shells came out of the
shell when immersed in water walking like a polype
& attached itself to the side of the vessel without
returning to the shell.

[illegible] Phil. Trans.

3

hursday

is opposite Mr. Robinson's — yet, you
eds or its View. You are in the midst
spot which appeared to me to be
talk of their

IX. Its animal a TETHYS. *DONAX.*

Bivalve, with the frontal margin very blunt.

Lin. Syſt. 1127. *No.* 105. *Faun. Suec. No.* 2142. *Liſt. Angl. tab.* v. *fig.* 35. *Trunculus.*
Conch. tab. 376. *ſ.* 217. 45. YELLOW.

D. with a gloſſy ſhell, of a whitiſh color tinged with dirty yellow, and marked lengthways with many elegant minute *ſtriæ*; the inſide purple.

Breadth an inch and a tenth.

Tab. lv. *fig.* 45.

Lin. Syſt. 1127. *No.* 107. *Denticulata.*
46. PURPLE.

C. of a cuneiform ſhape; extremely blunt at one end, ſtriated like the former, ſerrated at the edges; color within purple; tranſverſely tinged with the ſame on the outſide.

Breadth, a little ſuperior to the former.

X. Its animal a TETHYS. *VENUS.*

Hinge with three teeth near to each other; one placed longitudinally, and bent outwards.

Mercenaria.
47. COMMERCIAL.

Lin. Syſt. 1131. *No.* 123. *Faun. Suec. No.* 2144. *Liſt. Angl. tab.* iv. *fig.* 22.
Conch. tab. 272.

V. with a ſtrong, thick, weighty ſhell, covered with a brown epidermis; pure white within; ſlightly ſtriated tranſverſely.

Circumference above eleven inches.

Theſe are called in *North America Clams*; they differ only in having a purple tinge within. *Wampum* or *Indian* money is made of them *.

Tab. liii. *fig.* 47.

Erycina.
48. SICILIAN.

Lin. Syſt. 1131. *No.* 122. *Liſt. Conch. tab.* 284.

V. with a very thick ſhell, marked with high-ridged ribs tranſverſely; undulated longitudinally.

Fig. 48. A. a worn ſhell.

Circumference about five or ſix inches.

Tab. liv. *fig.* 48. 48. A.

Exoleta.
49. ANTIQUATED.

Lin. Syſt. 1134. *No.* 142.

V. with orbicular ſhells, with numerous tranſverſal *ſtriæ*; white, gloſſy.

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* *Burnaby's Travels, p.* 104. *ed.* 2.

Diameter about two inches.

A. Variety of the ſame, marked ſtrongly with numerous *ſtriæ*, and longitudinally with a few ſhort yellowiſh lines. *Vide Liſt. Conch. tab.* 292. 293.

Tab. liv. *fig.* 49. A. *Tab.* lvi. *fig.* 49.

Liſt. Conch. tab. 281.

Rugoſa.
50. Wrinkled.

V. with thick ſhells, marked with rugoſe concentric *ſtriæ*.

A. Variety, with *ſtriæ* leſs elevated, and marked with yellowiſh zigzag lines. *Liſt. Conch.* 282.

Length, an inch; breadth, an inch and a quarter.

Tab. lvi. *fig.* 50.

Undata.
51. Waved.

V. with thin convex orbiculated ſhells, of a white color, tinged with yellow, and marked with thin concentric *ſtriæ*; waved at the edges.

Size of a hazel nut.

Tab. lv. *fig.* 51.

Sinuoſa.
51. A. Indented.

V. with thin convex ſhells, with a very deep obtuſe *ſinus*, or bending on the front.

Size of the figure.

Weymouth. From the Portland cabinet.

Tab. lv. *fig.* 51. A.

Borealis.
52. Northern.

Lin. Syſt. 1134. *No.* 143. *Liſt. Angl. tab.* iv. *fig.* 23. *Conch. tab.* 253. *fig.* 88.

no engr.

V. with thin ſhells, much depreſſed, marked with ſlender concentric *ſtriæ.*

Length one inch and a half; breadth near two inches.

Litterata.
53. Lettered.

Lin. Syſt. 1135. *No.* 147. *Faun. Suec. No.* 2146. *Liſt. Conch. tab.* 400. *fig.* 239.

V. with thick ſhells, marked tranſverſely with frequent crenulated *ſtriæ*, ſometimes ſmoother; of a whitiſh color, ſtreaked with lines reſembling characters. In *Britiſh* ſpecimens uſually faint; in foreign very ſtrong and elegant.

Length an inch and three quarters; breadth two inches and a half.

Tab. lvii. *fig.* 53.

Deflorata.
54. Fading.

Lin. Syſt. 1133. *No.* 132.

V. with thin oval ſhells, ſtriated lengthways, ſemipellucid; rayed with purple and white, both within and without.

Size near an inch and half in breadth.

Tab. lvii. *fig.* 54.

Rhomboides. 55. Rhomboid.

no engr.

V. with depreſſed rhomboidal ſhells, marked with concentric and very neat *ſtriæ*, of a pale brown color variegated.

Length three quarters of an inch; breadth an inch and three quarters.

Ovata. 56. Oval.

V. with ovated ſhells, ſtriated elegantly from hinge to margin, and ſlightly ſtriated tranſverſely.

Size of a horſe-bean.

Tab. lvi. *fig.* 56.

XI. Its animal a Tethys? *ARCA.*

Shell bivalve equivalve.

Teeth of the hinge numerous, inſerted between each other.

Tortuoſa. 57. Distorted.

Lin. Syſt. 1140. *No.* 168. *Borlaſe Nat. Hiſt. Cornw. tab.* xxviii. *fig.* 15, 16.
Liſt. Conch. tab. 368.
Mytilus *Matthiol.* apud *Dioſcor. lib.* ii. *c.* 5. *p.* 301.

A. with a rhomboid ſhell, deeply ſtriated from the apex to the edges.

Inhabits *Cornwall.* Found alſo near *Weymouth.*

Tab. lviii. *fig.* 57. not there!

Glycymeris.
58. ORBICULAR.

Lin. Syſt. 1143. *No.* 181. *Liſt. Conch. tab.* 247. *fig.* 82.

A. with thick orbicular ſhells, marked with concentric *ſtriæ*; white zigzagged with ferruginous; edges crenulated.

Diameter about two inches.

Tab. lviii. *fig.* 58.

Nucleus.
59. SILVERY.

Lin. Syſt. 1141. *No.* 184.

A. with unequally triangular ſhells; ſmooth, pure white without, ſilvery within; margin ſinely crenated.

Size of a pea.

Tab. lviii. *fig.* 59.

Barbata.
60. FRINGED.

no engr.

Lin. Syſt. 1140. *No.* 170.

A. with oblong ſhells faintly ſtriated; beſet with *Byſſus* ſo as to appear bearded.

In *England* of the ſize of a horſe-bean, the foreign ſpecimens much larger.

XII. Its animal a TETHYS. *PECTEN.* SCALLOP.

Shell bivalve, unequal.

The hinge toothleſs, having a ſmall ovated hollow.

*

Lin. Syſt. 1144. *No.* 185. *Faun. Suec. No.* 2148. *Liſt. Angl. tab.* v. *fig.* 29. *Maximus.* 61. GREAT.

P. with fourteen rays, very prominent and broad; ſtriated lengthways above and below; ears equal.

Grows to a large ſize. *Tab.* lix. *fig.* 61.

Found in beds by themſelves; are dredged up, and pickled and barrelled for ſale.

The antients ſay, that they have the power of removing themſelves from place to place by vaſt ſprings or leaps *. This ſhell was called by the *Greeks* Κτεις, by the *Latins Pecten*, and was uſed by both as a food; and when dreſſed with pepper and cummins, was taken medicinally †.

The elegant figure of the crouching *Venus*, in the *Maffei* collection, is placed ſitting in a ſhell of this kind. The ſculptor probably was taught by the mythology of his time, that the goddeſs aroſe from the ſea in a ſcallop. This perhaps may have been the *concha venerea* of *Pliny*, ſo ſtyled from this circumſtance.

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* *Ariſt. Hiſt. An. lib.* iv. *c.* 4.

† *Athenæus, lib.* iii. *p.* 90.

Another ſhell has the ſame name, for a different reaſon *.

The ſcallop is commonly worn by pilgrims on their hat, or the cape of their coat, as a mark that they had croſſed the ſea in their way to the *Holy Land*, or to ſome diſtant object of devotion.

Jacobæus.
62. Lesser. *Lin. Syſt.* 1144. *No.* 186. *Liſt. Conch. tab.* 165. *fig.* 2.

P. with fifteen broad rays, rounded on the flat ſide, and moſt finely tranſverſely ſtriated; angulated on the convex, and ſtriated lengthways; ears nearly equal; concave and ſmooth on the upper ſide.

A rare ſpecies in *Great Britain.*

Tab. lx. *fig.* 62.

** Both Shells convex.

Subrufus.
63. Red. Pecten tenuis, ſubrufus, maculoſus, circiter 20 ſtriis majoribus, at lævibus, donatus. *Liſt. Angl. p.* 185. *tab.* v. *fig.* 30.

P. with twenty narrow rays, finely ſtriated; ears nearly equal, and alſo ſtriated.

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* See *No.* 82.

A ſpe-

A ſpecies ſeldom exceeding two inches and a quarter in length; the breadth nearly the ſame.

A thin ſhell, generally of a fine pale red.

Tab. lx. *fig.* 63.

Lin. Syſt. 1146. *No.* 199. *Liſt. Conch. tab.* 178. *fig.* 15.

Varius.
64. VARIEGATED.

P. with about thirty echinated imbricated rays; ſhells almoſt equally convex; one ear vaſtly larger than the other.

General length two inches and a half; breadth a little leſs.

Color, a ſordid red mixed with white.

Often found in oyſter-beds, and dredged up with them.

Tab. lxi. *fig.* 64.

Lin. Syſt. 1146. *No.* 200.
Pecten minimus anguſtior inequalis ferè et aſper, &c.
Liſt. Angl. p. 186. *tab.* v. *fig.* 31.

Puſio?
65. WRITHED.

P. with above forty ſmall rays; with unequal ears; the ſurface always irregularly waved or deformed, as if by ſome accident; but this appearance regularly maintained.

Length about two inches.

Colors commonly very brilliant reds.

Tab. lxi. *fig.* 65.

Obſoletus.
66. WORN.

P. with one large ſtriated ear, with ſmooth equal ſhells; eight obſolete rays; of a dark purple color.

A ſmall ſpecies three quarters of an inch long.

Tab. lxi. *fig.* 66.

Lævis.
67. SMOOTH.
no engr.

P. with unequal ribbed ears; the reſt of the ſhell entirely ſmooth.

Very ſmall.

Angleſea.

Glaber.
68. FURROWED.

Lin. Syſt. 1146. *No.* 201.

no engr.

P. with a very thin ſhell; fifteen faint rays; equal ears. The inner ſide of the ſhells marked with rays, divided by a ſingle *ſulcus.*

Angleſea. A ſcarce ſpecies. Small.

OSTREA.
OYSTER.

XIII. Its animal a TETHYS.

Shell bivalve, roughly plated on the outſide.

Edulis.
69. EDIBLE.

Lin. Syſt. 1148. *No.* 211. *Faun. Suec. No.* 2149. *Liſt. Angl. tab.* iv. *fig.* 26.

O. commonly of an orbicular form, and very rugged. A deſcription of ſo well-known a ſhell is needleſs. Varies in ſize in different places. This is figured with an *Anomia* on it, *No.* 70. B.

Britain has been noted for oyſters from the time of *Juvenal* *, who ſatyrizing an epicure, ſays,

> *Circæis* nata forent, an
> *Lucrinum* ad Saxum, *Rutupinove* edita fundo,
> Oſtrea, callebat primo deprendere morſu.

> He, whether *Circe's* rock his oyſters bore,
> Or *Lucrine* lake, or diſtant *Richborough's* ſhore
> Knew at firſt taſte

The luxurious *Romans* were very fond of this fiſh, and had their *layers* or ſtews for oyſters, as we have at preſent. *Sergius Orata* † was the firſt inventor, as early as the time of *L. Craſſus* the orator. He did not make them for the ſake of indulging his appetite, but through avarice, and made great profits from them. *Orata* got great credit for his *Lucrine* oyſters; for, ſays *Pliny*, the *Britiſh* were not then known.

The antients eat them raw, and ſometimes roaſted. They had alſo a cuſtom of ſtewing them with mallows and docks, or with fiſh, and eſteemed them very nouriſhing ‡.

Britain ſtill keeps its ſuperiority in oyſters over other countries. Moſt of our coaſts produce them naturally, and in ſuch places they are taken by dredging, and are become an article of commerce, both raw and pickled. The very ſhells, calcined, become an uſeful medicine as an abſorbent. In common with other ſhells, prove an excellent manure.

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* *Satyr.* iv. *V.* 140.

† *Plin. Nat. Hiſt. lib.* ix. *c.* 54.

‡ *Athenæus, lib.* iii. *p.* 92.

Stews or *layers* of oyſters are formed in places, which nature never allotted as habitations for them. Thoſe near *Colcheſter* have been long famous; at preſent there are others, that at leſt rival the former, near the mouth of the *Thames*. The *oyſters*, or their ſpats, are brought to convenient places, where they improve in taſte and ſize. It is an error to ſuppoſe, that the fine green obſerved in oyſters taken from artificial beds, is owing to *copperas*; it being notorious how deſtructive the ſubſtance or the ſolution of it is to all fiſh. I cannot give a better account of the cauſe, or of the whole treatment of oyſters, than what is preſerved in the learned Biſhop *Sprat's* Hiſtory of the ROYAL SOCIETY, from p. 307 to 309.

'In the month of *May* the oyſters caſt their 'ſpaun, (which the dredgers call their ſpats;) it 'is like to a drop of candle, and about the big'neſs of a halfpenny.

'The *ſpat* cleaves to ſtones, old oyſter-ſhells, 'pieces of wood, and ſuch-like things, at the bot'tom of the ſea, which they call *cultch*.

‘ ’Tis probably conjectured, that the *ſpat* in ‘ twenty-four hours begins to have a ſhell.

‘ In the month of *May*, the dredgers (by the ‘ law of the Admiralty court) have liberty to catch ‘ all manner of oyſters, of what ſize ſoever.

‘ When they have taken them, with a knife ‘ they gently raiſe the ſmall brood from the *cultch*, ‘ and then they throw the *cultch* in again, to pre-‘ ſerve the ground for the future, unleſs they be ‘ ſo newly ſpat, that they cannot be ſafely ſevered ‘ from the *cultch*; in that caſe they are permitted ‘ to take the ſtone or ſhell, &c. that the *ſpat* is ‘ upon, one ſhell having many times twenty ‘ *ſpats*.

‘ After the month of *May*, it is felony to carry ‘ away the *cultch*, and puniſhable to take any ‘ other oyſters, unleſs it be thoſe of ſize, (that is ‘ to ſay) about the bigneſs of an half-crown piece, ‘ or when the two ſhells being ſhut, a fair ſhilling ‘ will rattle between them.

‘ The places where theſe oyſters are chiefly ‘ catcht, are called the *Pont-Burnham*, *Malden*, ‘ and *Colne* waters; the latter taking its name ‘ from the river of *Colne*, which paſſeth by *Colne-‘ Cheſter*, gives the name to that town, and runs ‘ into a creek of the ſea, at a place called the ‘ *Hythe*, being the ſuburbs of the town.

‘ This brood and other oyſters they carry to ‘ creeks of the ſea, at *Brickel-Sea*, *Merſey*, *Langno*,

Fingrego,

‘ *Fringrego*, *Wivenho*, *Toleſbury*, and *Saltcoaſe*, and ‘ there throw them into the channel, which they ‘ call their beds or layers, where they grow and ‘ fatten, and in two or three years the ſmalleſt ‘ brood will be oyſters of the ſize aforeſaid.

‘ Thoſe oyſters which they would have green, ‘ they put into pits about three feet deep in the ‘ ſalt-marſhes, which are overflowed only at ſpring-‘ tides, to which they have ſluces, and let out ‘ the ſault-water until it is about a foot and half ‘ deep.

‘ Theſe pits, from ſome quality in the ſoil co-‘ operating with the heat of the ſun, will become ‘ green, and communicate their colour to the ‘ oyſters that are put into them in four or five days, ‘ though they commonly let them continue there ‘ ſix weeks or two months, in which time they will ‘ be of a dark green.

‘ To prove that the ſun operates in the greening, ‘ *Toleſbury* pits will green only in ſummer; but ‘ that the earth hath the greater power, *Brickel-‘ Sea* pits green both winter and ſummer: and for ‘ a further proof, a pit within a foot of a green-‘ ing-pit will not green; and thoſe that did green ‘ very well, will in time loſe their quality.

‘ The oyſters, when the tide comes in, lie ‘ with their hollow ſhell downwards, and when it ‘ goes out, they turn on the other ſide; they re-‘ move not from their place, unleſs in cold weather, ‘ to cover themſelves in the Ouſe.

‘ The

Oyster

1. Valmont de Bomare. Very ample & interesting

2. Pennant Brit. Zoology IV. 102 = 108 extracted from Sprat's H. Royal Soc. & Hist. of Rochester by . .

3. Account of the curious worms app. of the oyster shells. Bak. Empl. 399 and Micr. made easy 241

4. Animalcules in their liquor. Baker Micr. made easy 239 & the young oysters also in their liquor.

5. Rondelet Part. II. p. 34 =

6. Pliny lib. X. c. LXIX supposes the oyster hears, but I rather think that, in common with fishes of all kinds, it takes on feeling the motion of the water. In lib. XXXII. c. 36 he treats of the oyster at large

7. Adams on the Microsc. 8° edit. p. 107. describes young oysters in the liquor, from Leeuwenhoek. Oyster animalcules described ibid. from Mons. Azout. And see p. 134-136.

8. Joblot Microsc. II. 20 gives an account of the young oysters or spat (fray) - but I suspect all the animals here described are not young oysters but only animalcules deposited (in the usual manner) in the putrid liquor. I conceive the young oysters are only to be found in the spat at particular season

9. Leeuwenhoek III. 37 describes a stinging sensation (such as I have felt myself when handling oysters) from some dirty matter adhering to oysters In vol. IV. p. 512 he describes the young oysters taken in the liquor. (the spat probably being broken or dispersed in the opening of the oyster.) In vol. II part II. p. 144 he seems to correct his opinion that the young

oysters are found in the liquor & he considers them as animalcules; but then he makes them an-m. to be the semen masculinum of the oyster which seems still more absurd.

The same exception as to the goodness of the oyster in the months wanting the R is found among the French. See Breton's Chine en miniature V. 151.

There are some interesting remarks on oysters in Deslandes Sur la marine des anciens pp. 291 = 294 I think he is describing the sea Nereus or luminous insect in p. 294

M. ~~Godefroy~~ Gaillon of Dieppe sent a paper to the Royal Academy of Caen on the green colour that is found at certain times in oysters, & rejects the notion that this is a disease. He shews it to be produced by myriads of a microscopic insect (animalcule) of the Vibrion kind (What is the Vibrion, which I find in no dictionary?)
He calls the oyster a Mollusca.

See Rapport par M. Hebert Secr l'Acad de Caen 1821. p. 8.

Nucci

Cu, Romania XIV p. 607

It is said (I believe in Dr Roget's lectures) that the C. has a locomotive power by rapidly opening & closing its shell.

‘ The reaſon of the ſcarcity of oyſters, and conſe-
‘ quently of their dearneſs, is, becauſe they are of
‘ late years bought up by the *Dutch.*

‘ There are great penalties, by the Admiralty
‘ court, laid upon thoſe that fiſh out of thoſe
‘ grounds which the court appoints, or that deſtroy
‘ the *cultch*, or that take any oyſters that are not of
‘ ſize, or that do not tread under their feet, or
‘ throw upon the ſhore, a fiſh which they call a
‘ *Five-finger* *, reſembling a ſpur-rowel, becauſe
‘ that fiſh gets into the oyſters when they gape,
‘ and ſucks them out.

‘ The reaſon why ſuch a penalty is ſet upon
‘ any that ſhall deſtroy the *cultch*, is, becauſe
‘ they find that if that be taken away, the Ouſe
‘ will increaſe, and the muſcles and cockles will
‘ breed there, and deſtroy the oyſters, they having
‘ not whereon to ſtick their *ſpat.*

‘ The oyſters are ſick after they have ſpat;
‘ but in *June* and *July* they begin to mend, and
‘ in *Auguſt* they are perfectly well: the male
‘ oyſter is *black-ſick*, having a black ſubſtance in
‘ the fin; the female *white-ſick*, (as they term it)
‘ having a milky ſubſtance in the fin. They are
‘ ſalt in the pits, ſalter in the layers, but ſalteſt
‘ at ſea.’

To this I beg leave to join a ſort of preſent ſtate of this article, borrowed from the 84th page of the Hiſtory of *Rocheſter*, in 12mo, publiſhed in 1776.

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* ASTERIAS *glacialis*, the common Sea Star.

‘ Great part of the inhabitants of *Stroud* are
‘ ſupported by the fiſheries, of which the oyſter
‘ is moſt conſiderable. This is conducted by a
‘ company of free dredgers, eſtabliſhed by pre-
‘ ſcription, but ſubject to the authority and go-
‘ vernment of the mayor and citizens of *Rocheſter*.
‘ In 1729 an act of parliament was obtained, for
‘ the better management of this fiſhery, and for
‘ confirming the juriſdiction of the ſaid mayor and
‘ citizens, and free dredgers. The mayor holds
‘ a court of admiralty every year, to make ſuch
‘ regulations as ſhall be neceſſary for the well
‘ conducting this valuable branch of fiſhery. Seven
‘ years apprenticeſhip entitles a perſon to the free-
‘ dom of this company. All perſons catching
‘ oyſters, not members of the fiſhery, are liable
‘ to a penalty. The company frequently buy
‘ brood or ſpat from other parts, which they lay
‘ in this river, where they ſoon grow to maturity.
‘ Great quantities of theſe oyſters are ſent to *Lon-*
‘ *don*; to *Holland*, *Weſtphalia*, and the adjacent
‘ countries.

ANOMIA. XIV. Bivalve, inequivalve.

One valve perforated near the hinge; affixed by that perforation to ſome other body.

Lin.

Ephippium.
70. Larger.

Lin. Syſt. 1150. *No.* 218. *Liſt. Conch. tab.* 204. *fig.* 38.

A. with the habit of an oyſter; the one ſide convex, the other flat; perforated, adherent to other bodies, often to oyſter-ſhells, by a ſtrong tendinous ligature; color of inſide perlaceous.

Size near two inches diameter.

Tab. lxii. ſhews the exterior ſide of the ſhell; and the interior of the upper valve adhering to an oyſter.

Squammula.
71. Small.

no engr

Lin. Syſt. 1151. *No.* 221.

A. with ſhells reſembling the ſcales of fiſh; very delicate and ſilvery. Much flatted. Perforated. Very ſmall.

Adheres to oyſters, crabs, and lobſters, and ſhells.

The foſſil ſpecies of the *Anomia* genus are uncommonly numerous in this iſland, in our chalk-pits and limeſtone-quarries; but are foreign to the work in hand. The reader who wiſhes to be acquainted with their appearance, may ſatisfy himſelf, by conſulting *Liſter's* Hiſtory of Shells, appendix to the 3d book, tab. 447, &c. and *Hiſt. an. Angl.* tab. viii. and ix. *Plot's* Hiſt. *Oxfordſhire*, tab. iii. and his Hiſtory of *Staffordſhire*, tab. xi.

***MYTILUS.* MUSSEL.** XV. Its animal an ASCIDIA.

Bivalve; often affixed to ſome ſubſtance by a beard.

Hinge without a tooth, marked by a longitudinal hollow line.

Rugoſus. 72. RUGGED. *Lin. Syſt.* 1156. *No.* 249. *Liſt. Angl. tab.* iv. *fig.* 21.

M. with a brittle ſhell, very rugged, and in ſhape moſt irregular; uſually oblong, and rounded at the ends.

Length near an inch. Color whitiſh.

Always found lodged in *limeſtone*. The outſide generally appears honey-combed; but the apertures are too ſmall for the ſhell to paſs through, without breaking into the cell they are lodged in. Multitudes are found in the ſame ſtone: but each has a ſeparate apartment, with a different external ſpiracle.

Tab. lxiii. *fig.* 72.

Edulis. 73. EDIBLE. *Lin. Syſt.* 1157. *No.* 253. *Faun. Suec. No.* 2156. *Liſt. Angl. tab.* iv. *fig.* 28.

M. with a ſtrong ſhell, ſlightly incurvated on one ſide: angulated on the other. The end near the hinge

Muscles produce the urticaria or nettle rash when swallowed by the inhabitants of the Yorkshire coast.

Other shell fish as lobsters, crabs & shrimps also produce it

Bateman on cutan. dis. 89

hinge pointed; the other rounded. *Tab.* lxiii. *fig.* 73.

When the *epidermis* is taken off, is of a deep blue color.

Abundance of ſmall pearls, called *ſeed-pearls*, were till of lâte procured from this ſpecies of muſſel, for medical purpoſes; but I believe they are now diſuſed, ſince crabs-claws and the like have been diſcovered to be as efficacious, and a much cheaper abſorbent.

Found in immenſe beds, both in deep water; and above low-water mark. A rich food, but noxious to many conſtitutions. Affect with ſwellings, blotches, &c. falſely attributed to the pea-crab. The remedy oil, or ſalt and water.

Ne *fraudentur gloriâ ſua littora.* I muſt in juſtice to *Lancaſhire* add, that the fineſt muſſels are thoſe called *Hambleton Hookers*, from a village in that county. They are taken out of the ſea, and placed in the river *Wier*, within reach of the tide, where they grow very fat and delicious.

Incurvatus. 74. Crooked.

M. very crooked on the ſide, near the end; then greatly dilated, and covered with a thick rough *epidermis*. Within has a violet tinge.

Found on the coaſt of *Angleſea*, near *Prieſtholme*; uſually an inch and an half long.

Tab. lxiv. *fig.* 74.

Pellucidus. 75. PELLUCID. M. with a delicate tranſparent ſhell, moſt elegantly rayed lengthways, with purple and blue; like the former in ſhape, but more oval. Commonly ſhorter than two inches.

Angleſea. Found ſometimes in oyſter-beds; ſometimes in trowling over ſlutchy bottoms.

Tab. lxiii. *fig.* 75.

Umbilicatus. 76. UMBILICATED. M. with a ſtrong ſhell, and the ſpace oppoſite to the hinge deeply inflected or umbilicated.

The form nearly oval. The length ſometimes five inches.

A rare ſpecies, and new. Sometimes dredged up off *Prieſtholme* iſland, *Angleſea.* Diſcovered by the reverend Mr. *Hugh Davies.*

The pea-crab found in this ſpecies of a larger ſize than uſual.

Tab. lxv. *fig.* 76.

Curtus. 76. A. SHORT M. with a ſhort, ventricoſe, obtuſe ſhell, of a dirty yellow color.

Size of the figure.

Weymouth. From the PORTLAND cabinet.

Tab. lxiv. *fig.* 76. A.

Lin. Syſt. 1158. *No.* 256. *Liſt. Conch. tab.* 356. *fig.* 195. *Modiolus.* 77. GREAT.

M. with a ſtrong ſhell, with a blunted upper end; one ſide angulated near the middle; from thence dilating towards the end, which is rounded.

The greateſt of *Britiſh* muſſels. Length from ſix to ſeven inches.

Lies at great depths. Often ſeizes the bait of the ground lines, and is taken up with the hooks.

Tab. lxvi. *fig.* 77.

Lin. Syſt. 1158. *No.* 257. *Liſt. Angl. App. tab.* i. *fig.* 3. *Cygneus.* 78. SWAN.

M. with a thin brittle ſhell, very broad and convex, marked with concentric ſtriæ. Attenuated towards one end; dilated towards the other. Decorticated about the hinge.

Color, dull green.

Length ſix inches; breadth three and a half.

Inhabits freſh waters. Pearls are found in this and the following ſpecies.

Tab. lxvii. *fig.* 78.

Lin. Syſt. No. 258. *Faun. Suec. No.* 2158. *Liſt. Angl. tab.* i. *fig.* 2. *Anatinus.* 79. DUCK.

M. with a ſhell leſs convex, and more oblong than the laſt. Very brittle, and ſemi-tranſparent. Space round the hinges like the laſt.

Length about five inches; breadth two and a quarter.

Inhabits freſh waters.

Crows feed on theſe muſſels; and alſo on different ſhell-fiſh. It is diverting to obſerve, that when the ſhell is too hard for their bills, they will fly with it to a great height, drop the ſhell on a rock, and pick out the meat, when the ſhell is fractured by the fall.

Tab. lxviii. *fig.* 79.

PINNA.
NACRE.

XVI. Its animal a SLUG.

Bivalve, fragil, furniſhed with a beard.
Gapes at one end. Hinge without a tooth.

Fragilis.
80. BRITTLE

P. with a very thin ſemi-pellucid whitiſh ſhell, moſt opake near to the apex. Marked on the ſurface with longitudinal ſlender ribs, roughened with concave ſcales; and the whole traverſed by innumerable fine *ſtriæ*.

In young ſhells the ribs and ſcales are almoſt obſolete. The valves of leſſer tranſverſe diameter.

The largeſt about five inches and a half long; and three and a quarter broad in the broadeſt part. The figure is of a broader ſpecimen than uſual.

Dredged up at *Weymouth*. From the PORTLAND cabinet.

Tab. lix. *fig.* 80.

Ingens.
81. Great.
No engr.

I ſaw ſpecimens of ſome vaſt *Pinnæ*, found among the farther *Hebrides*, in the collection of Doctor *Walker*, at *Moffat*. They were very rugged on the outſide, but I cannot recollect whether they were of the kind found in the *Mediterranean* or *Weſt Indies*.

Div. III. Univalve Shells.

With a regular ſpire.

CYPRÆA.
GOWRIE.

XVII. Its animal a Slug.
Shell ſub-oval, blunt at each end.
The aperture the length of the ſhell, longitudinal, linear. Toothed.

Pediculus.
82. Common.

Lin. Syſt. 1180. *No.* 364. *Liſt. Angl. tab.* iii. *fig.* 17. *Conch. tab.* 706, 707. *fig.* 56 and 57.

C. with numerous ſtriæ, ſome bifurcated. Varies with having three brown ſpots on the back.

Tab. lxx. *fig.* 82.

This genus is called *Cypræa*, and *Venerea*, from its being peculiarly dedicated to *Venus*; who was ſaid to have endowed a ſhell of this genus with the powers of a *Remora*, ſo as to impede the courſe of the ſhip which was ſent by *Periander*, tyrant of *Corinth*, with orders to caſtrate the young nobility of *Corcyra* *.

BULLA. DIPPER.

XVIII. Its animal a SLUG.
Shell ſub-oval.
Aperture oblong, ſmooth.
One end a little convoluted.

Lignaria. 83. WOOD.

Lin. Syſt. 1184. *Liſt. Conch. tab.* 714. *fig.* 71.

B. of an oval form, and ſtriated tranſverſely. Is narrower towards one end, which is a little umbilicated. Of a dirty color, like ſome woods, whence the trivial name. The inſide of the ſhell viſible to the very end, through the *columella*.

Length about two inches. *Tab.* lxx. *fig.* 83.

Ampulla. 84. OBTUSE.

no engr.

Lin Syſt. 1183. *No.* 378.

B. with a brittle ſhell, more obtuſe at the end; and the inner ſide lapping over the *columella*, ſo as to render it inviſible.

Poſſibly a young ſhell of the *B. Ampulla*?

Found near *Weymouth*.

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[*] *Plinii, lib.* ix. *c.* 25. xxxii. *c.* 1.

Liſt. Conch tab. 714. *fig.* 70.

Cylindracea.
85. Cylindric.

B. white, cylindric, a little umbilicated at the end. About twice the ſize of a grain of wheat.
Tab. lxx. *fig.* 85.

Patula.
85. A. Open.

B. with one end much produced, and fuſiform. The aperture very patulous.
Weymouth. From the Portland cabinet.
Tab. lxx. *fig.* 85. A.

VOLUTA.
VOLUTE.

XIX. Its animal a Slug.
Aperture narrow, without a beak.
Columella pleated.

Lin. Syſt. 1187. *No.* 394. *Liſt. Conch. tab.* 835.

Tornatilis.
86. Oval.

V. exactly oval; acuminated at each end; with a ſingle fold near the mouth, or upper part of the *columella*. With five ſpires. Striated ſpirally. Pale red, with white *faſciæ*.
Angleſea.
Tab. lxxi. *fig.* 86.

Jonenſis.
87. Jona.

V. with a very thin brittle ſhell, with two ſmall ſpires.

Inhabits the iſle of *Jona*, or *Y Columb-kil.*

Tab. lxxi. *fig.* 87.

BUCCINUM. WHELK. XX. Its animal a Slug.

Aperture oval, ending in a ſhort canal.

Pullus. 88. Brown. *Lin. Syſt.* 1201. *No.* 458. *Gualtieri. tab.* 44. *fig.* N. *Liſt. Conch. tab.* 971. *fig.* 26.

B. with five ſpires ſtriated, waved, and tuberculated. Aperture wrinkled; upper part replicated.

Length five-eighths of an inch.

Tab. lxxii. *fig.* 88.

Lapillus. 89. Massy. *Lin. Syſt.* 1202. *No.* 467. *Faun. Suec. No.* 2161. *Liſt. Angl. tab.* iii. *fig.* 5, 6. *Liſt. Conch. tab.* 965.

B. with about five ſpires, often obſolete; inſide of the mouth ſlightly toothed. A very ſtrong thick ſhell, of a whitiſh color.

A variety yellow; or faſciated with yellow on a white ground; or ſulcated ſpirally, and ſometimes reticulated.

See *figures* 89. *tab.* lxxii.

In many, which I ſuſpect to be ſhells not arrived at full growth, the lip is thin and cultrated.

Length near an inch and a half.

Inhabits (in vaſt abundance) rocks near low-water mark.

This is one of the *Engliſh* ſhells that produces the purple dye, analogous to the *purpura* of the antients: our ſhell has been made uſe of as an object of curioſity.

The antient has been long ſince ſuperſeded by the introduction of the inſect *Coccus Cacti*, or the *Cochineel* beetle. The ſhells were of the genus of *Murex*, mentioned by *Linnæus*, *pp.* 1214, 1215. But one was a ſort of *Buccinum*. *Pliny* deſcribes both *. The fineſt was the *Tyrian.*

> 'Tyrioque ardebat Murice lana;'

A ſtrong expreſſion of *Virgil*, who deſcribes the cloth,

> 'Glowing with the Tyrian MUREX.'

The ſpecies of ſhells are found in various parts of the *Mediterranean*. Immenſe heaps of them are to be ſeen about *Tarentum* † to this day, evincing one place where this precious liquor was extracted.

The proceſs of obtaining the *Engliſh Purpura* is well deſcribed by Mr. *William Cole*, of *Briſtol*, in 1684, in the following words ‡.

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* *Lib.* ix. *c.* 36.

† *Baron Riedeſel's Travels. p.* 174.

‡ *Ph. Tr. Abr.* ii. 826.

‘ The ſhells being harder than moſt of other ‘ kinds, are to be broken with a ſmart ſtroke with ‘ a hammer, on a plate of iron, or firm piece of ‘ timber, (with their mouths downwards) ſo as ‘ not to cruſh the body of the fiſh within; the ‘ broken pieces being pick’d off, there will appear ‘ a white vein, lying tranſverſely in a little furrow ‘ or cleft, next to the head of the fiſh, which ‘ muſt be digged out with the ſtiff point of a ‘ horſe-hair pencil, being made ſhort and tapering. The letters, figures, or what elſe ſhall be ‘ made on the linnen, (and perhaps ſilk too) will ‘ preſently appear of a pleaſant light-green color, ‘ and if placed in the ſun, will change into the ‘ following colours, i. e. if in winter, about noon; ‘ if in the ſummer, an hour or two after ſun-riſing, ‘ and ſo much before ſetting; for in the heat of ‘ the day, in ſummer, the colours will come on ‘ ſo faſt, that the ſucceſſion of each colour will ‘ ſcarcely be diſtinguiſhed. Next to the firſt light-‘ green, it will appear of a deep green, and in ‘ few minutes change into a ſea-green, after which, ‘ in a few minutes more, it will alter into a ‘ watchet-blue; from that, in a little time more, ‘ it will be of a purpliſh-red; after which, lying ‘ an hour or two, (ſuppoſing the ſun ſtill ſhining) ‘ it will be of a very deep purple-red, beyond ‘ which the ſun can do no more.

‘ But then the laſt and moſt beautiful colour, ‘ after waſhing in ſcalding water and ſoap, will

‘ (the matter being again put into the ſun or ‘ wind to dry) be of a fair bright crimſon, or near ‘ to the prince’s colour, which afterwards, notwithſtanding there is no uſe of any ſtiptick to ‘ bind the colour, will continue the ſame, if well ‘ ordered; as I have found in handkerchiefs, ‘ that have been waſhed more than forty times; ‘ only it will be ſomewhat allayed, from what it ‘ was, after the firſt waſhing. While the cloth ‘ ſo writ upon lies in the ſun, it will yield a very ‘ ſtrong and fœtid ſmell, as if garlick and *aſſa-* ‘ *fœtida* were mixed together.’

Lin. Syſt. 1264. *No.* 475. *Faun. Suec. No.* 2163. *Liſt. Angl. tab.* iii. *fig.* 2. *Undatum.*
Liſt. Conch. tab. 962. *fig.* 14. 90. WAVED.

B. with ſeven ſpires, ſpirally ſtriated, and deeply and tranſverſely undulated.

Length three inches.

Inhabits deep water.

Tab. lxxiii. *fig.* 90.

B. Leve tenue ſtriatum et undatum. *Liſt. Angl. p.* 157. *tab.* iii. *fig.* 3. *Striatum.* 91. STRIATED.

B. with eight ſpires, with elevated *ſtriæ*, undulated near the apex.

Length near four inches.

Tab. lxxiv. *fig.* 91.

Lin.

Reticulatum. 92. Reticulated. *Lin. Syſt.* 1204. *No.* 476. *Liſt. Conch. tab.* 966. *fig.* 21.

B. with ſpires ſcarcely raiſed, and ſtrongly reticulated; of a deep brown color, and of an oblong oval form. The aperture white, gloſſy, and denticulated.

Size of a hazel-nut.

Tab. lxxii. *fig.* 92.

Minutum. 93. Small. B. with five ſpires, ſtriated ſpirally; ribbed tranſverſely.

Size, leſs than a pea.

Found alſo in *Norway*. Vide *Act. Nidr.* tom. iv. *tab.* 16. *fig.* 25.

Tab. lxxix.

STROMBUS XXI. Its animal a Slug.

Shell univalve, ſpiral.

The opening much dilated, and the lip expanding, produced into a groove.

Pes Pelecani. 94. Corvorant's foot *Lin. Syſt.* 1207. *No.* 490. *Faun. Suec.* *No.* 2164. *Liſt. Conch. tab.* 866. *fig. min.*

Str. with ten ſpires, tuberculated along their ridges, with the lip expanding and digitated. The ſpires end in a moſt exquiſite point. Length about two inches. Extent of the expanſe an inch and a quarter.

Tab. lxxv. *fig.* 94.

XXII. Its animal a SLUG. *MUREX.*

The aperture oval; the beak narrows into a canal or gutter, a little aſcending.

Lin. Syſt. 1206. *No.* 526. *Gualtieri. tab.* 49. *fig.* H. *Erinaceus.* 95. **URCHIN.**

M. with an angular ſhell, ſurrounded with tubular ribs; each rib ending with its mouth on the angle. Conſiſts of ſix ſpires on the whole; a moſt rugged ſhell. The aperture exactly oval; the gutter or canal covered.

Length near two inches.

Tab. lxxvi. *fig.* 95.

M. with five or ſix ſpires, the body ventricoſe: the ſpires riſing into angulated ridges. The aperture ſemicircular. *Carinatus.* 96. **ANGULATED.**

Length near four inches.

From the PORTLAND cabinet.

Tab. lxxvii. *fig.* 96.

Antiquus.
97. ANTIQUE.

Lin. Syſt. 1222. *No.* 558. *Gualtieri, tab.* 46. E. *Faun. Suec. No.* 2165.

no engr.

M, with eight ſpires finely ſtriated; the firſt very ventricoſe, Color a dark dirty yellow. Length three inches and a half,

Deſpectus.
98. DESPISED,

Lin. Syſt. 1222. *No.* 559. *Faun. Suec. No.* 2166. *Liſt. Angl. tab.* iii. *fig.* 1.

M. with eight ſpires. The firſt large, ventricoſe, and produced; the others more prominent than thoſe of the preceding. Striated and ſomewhat rugged. The outſide white, the inſide gloſſy and yellow.

Length near five inches.

Inhabits the deep ſea. Dredged up in plenty with oyſters. Eaten by the poor; but oftener uſed for baits for cod and ray.

Tab. lxxviii. *fig.* 98.

Corneus.
99. HORNEY.

Lin. Syſt. 1244. *No.* 565. *Liſt. Angl. tab.* iii. *fig.* 4. *Conch. tab.* 913. *fig.* 5.

M. with a narrow oblong ſhell of eight ſtriated ſpires. Snout much produced. Color pure white, covered with a brown *epidermis.*

Length near three inches.

Tab. lxxvi. *fig.* 99.

Coſtatus. 100. RIBBED.

M. with an oblong ſhell of ſix ſpires, neatly ribbed. Vide *tab.* lxxix.

Minute.

Angleſea. Inhabits alſo *Norway.* *Act. Nidr.* tom. iv. *tab.* 16. *fig.* 26.

Acuminatus. 101. SHARP.

M. with a narrow oblong ſhell, acuminated ſpires, ribbed. Vide *tab.* lxxix.

Minute.

Decollatus? 102. SHORTENED.

Lin. Syſt. 1226. *No.* 578.

A ſpecies offered with doubts. Perhaps accidentally mutilated. Let the critical conchyliologiſt conſult *tab.* lxxix.

Minute.

TROCHUS. TOP.

XXIII. Its animal a SLUG.
Shell conic.
Aperture ſub-triangular.

Ziziphinus. 103. LIVID. *Lin. Syſt.* 1231. *No.* 599. *Liſt. Conch. tab.* 616. *No.* 1. *Liſt. Angl. tab.* iii. *fig.* 14. *Faun. Suec. No.* 2168.

TR. with a ſharp apex, imperforated bottom; with a *ſtria* elevated above the reſt. Each is ſmooth. The color livid, much ſpotted with deep red.

Tab. lxxx. *fig.* 103.

Conulus. 104. CONULE. *Lin. Syſt.* 1230. *No.* 598.

TR. with an imperforated baſe, and a prominent line along the ſpires. Scarcely diſtinct from the laſt.

Tab. lxxx. *fig.* 104.

Exaſperatus. 105. ROUGH. Trochus pyramidalis parvus, ruberrimus faſciis crebris exaſperatus. *Liſt. Conch. tab.* 616. *fig.* 2.

no engr.

I am unacquainted with this ſpecies; ſo refer the reader to *Liſter*, who deſcribes it as above; and marks the figure with A. as an *Engliſh* ſhell.

Umbilicaris. 106. UMBILICAL. *Lin. Syſt.* 1229. *No.* 592. *Liſt. Conch. tab.* 641. *fig.* 31, 32. *Liſt. Angl. tab.* iii. *fig.* 15.

TR. with a perforated baſe, and of a convex conic form; dirty white waved with purple. Varies much in colors.

A moſt common ſhell on all our ſhores.

Tab. lxxx. *fig.* 106.

Lin. Syſt. 1229. *No.* 590.

Cinerarius. 106*. CINEREOUS.

T. with a perforated baſe; ſpires a little prominent. Of a cinereous color, ſtriped obliquely.

Size of a pea.

Angleſea.

Lin. Syſt. 1228. *No.* 585.

Magus. 107. TUBERCULATED.

TR. with a perforated baſe; ſomewhat depreſſed: ſtriated; with the ridges of the ſpires riſing into blunt diſtinct tubercles. Color white, ziz-zagged with red.

When the upper coat is taken off, the next is of a rich mother-of-pearl color.

Angleſea.

Tab. lxxx. *fig.* 107.

Terreſtris. 108. LAND.

Minute, conic, livid.

A new ſpecies, diſcovered in the mountains of *Cumberland*, by Mr. *Hudſon*.

Tab. lxxx. *fig.* 108.

TURBO.
WREATH.

XXIV. Its animal a Slug.
Aperture round.

* Ventricoſe.

Littoreus.
109. Perriwinkle.

Lin. Syſt. 1232. *No.* 607. *Liſt. Angl. tab.* iii. *fig.* 9. *Faun. Suec. No.* 2169.

T. with five ſpires, the firſt ventricoſe, in younger ſubjects ſtriated ſpirally; in the old ſmooth, and of a duſky color.

Tab. lxxxi. *fig.* 109.

Abundant on moſt rocks, far above low-water mark. The *Swediſh* peaſants believe, that when theſe ſhells creep high up the rocks, they indicate a ſtorm from the ſouth.

They are called *Perriwinkles*; are ſold commonly in *London*, and eaten by the poor; as they are in moſt parts of the kingdom.

Tumidus.
110. Tumid.

Liſt. Angl. tab. ii. *fig.* 5.

T. with five tumid ſpires, the firſt ventricoſe, and all moſt elegantly ſtriated; of a pale-red color.

A rare ſhell. Inhabits woods in *Cambridgeſhire*, and ſome other counties in *England*.

Tab. lxxxii. *fig.* 110.

** Taper.

** Taper.

Clathrus. 111. BARRED.

Lin. Syſt. 1237. *No.* 631. *Faun. Suec. No.* 2170. *Liſt. Conch. tab.* 588. *fig.* 51.

T. with a taper ſhell of eight ſpires, diſtinguiſhed by elevated diviſions, running from the aperture to the apex.

A. A variety? Pellucid; ridges very thin.

Theſe are analogous to that curious and expenſive ſhell the *Wentle-trap.*

Tuberculata. 111*. STUDDED.

T. with about twelve ſpires of a duſky color, finely tuberculated.

From the coaſt of *Northumberland.*

Tab. lxxxii. *fig.* *111.

Duplicatus. 112. DOUBLED.

Lin. Syſt. 1239. *No.* 645. *Liſt. Angl. tab.* iii. *fig.* 7.

T. with a ſtrong taper ſhell, each ſpire marked with two prominent *ſtriæ.* Has about twelve ſpires.

Found by Doctor *Liſter* at *Scarborough,* who ſays it was five inches long.

Tab. lxxxi. *fig.* 112.

Terebra. 113. AUGER. *Lin. Syſt.* 1139. *No.* 645. *Seb. Muſ.* iii. *tab.* lvi. *fig.* 40. *Liſt. Angl. tab.* iii. *fig.* 8. *Faun. Suec. No.* 2171.

T. with a taper ſhell of twelve ſpires, ſpirally ſtriated.

Tab. lxxxi. *fig.* 113.

Albus. 114. WHITE. T. with eight ſpires, ſtriated tranſverſely; white.

Tab. lxxix.

Lævis. 115. SMOOTH T. with eight ſmooth ſpires, nearly obſolete.

Tab. lxxix.

Both about a third of an inch long. Found on the ſhores of *Angleſea.*

Perverſus. 116. REVERSED. *Lin. Syſt.* 1250. *No.* 650. *Faun. Suec. No.* *Liſt. Angl. tab.* ii. *fig.* 11.

T. with eleven ſpires of a duſky color. The mouth turned a contrary way to moſt others of the genus.

Length four-tenths of an inch; very taper.

Found in moſſes, eſpecially among the *Hypna.*

Tab. lxxxii. *fig.* 116.

Lin. Syſt. 1249. *No.* 649. *Liſt. Conch. tab.* 41. *fig. maj.* *Bidens.*
117. **Bident.**

T. at firſt ſight to be diſtinguiſhed from others of this genus by two teeth in the aperture. Agrees with the laſt in the contrary turn of the ſpires, which are twelve in number, and of a duſky hue.

Tab. lxxxi.

Lin. Syſt. 1249. *No.* 651. *Faun. Suec. No.* 2173. *Liſt. Angl. tab.* ii. *fig.* 6. *Conch. tab.* 41. *fig. min.* *Muſcorum.*
118. **Moss.**

T. of an oval ſhape, of the ſize of a grain of white muſtard. With four ſpires, very ſhining and brittle.

Found with the *Perverſus*.

Tab. lxxxii. *fig.* 118.

Buccinum exiguum faſciatum & radiatum. *Faſciatus.*
Liſt. Conch. tab. 19. *fig.* 14.
119. **Fasciated.**

T. with ſix ſpires; white, marbled or faſciated with black.

Length half an inch.

Very frequent in *Angleſea*, in ſandy ſoils near the coaſts.

Tab. lxxxii. *fig.* 119.

Ulvæ.
120. ULVA.

T. with four ſpires, the firſt ventricoſe; of a deep brown color; aperture oval.

Size of a grain of wheat.

Tab. lxxxvi. *fig.* 120.

Inhabits the *Ulva Lactuca* on the ſhores of *Flintſhire.*

HELIX.
SNAIL.

XXV. Its animal a SLUG.
Shell ſpiral, ſub-pellucid.
Semi-lunar aperture.

* Depreſſed.

Lapicida.
121. ROCK.

Lin. Syſt. 1241. *No.* 656. *Liſt. Angl. tab.* ii. *fig.* 14. *Faun. Suec. No.* 2174.

SN. with five ſpires, externally carinated or depreſſed to an edge. Umbilicated; of a deep brown color.

A land ſhell. Inhabits clefts of rocks.

Tab. lxxxiii. *fig.* 121.

Albella.
122. GREY.

Lin. Syſt. 1242. *No.* 658. *Liſt. Angl. tab.* ii. *fig.* 13. *Gualtieri, tab.* iii. *fig.* Q. *Faun. Suec. No.* 2175.

SN. with five ſpires rounded on the outſide. Thin, prettily faſciated along the ſpires with brown and white. Deeply umbilicated.

Inhabits dry ſandy banks.

Tab. lxxxv. *fig.* 122.

Lin. Syſt. 1242. *No.* 662. *Liſt. Angl. tab.* ii. *fig.* 27. *Gualtieri, tab.* iv. *fig.* E. E. *Faun. Suec. No.* 2176. *Planorbis.* 123. Flat.

Sn. with a very flat brown ſhell, ſlightly carinated on the outſide; the aperture oblique.

Inhabits ponds.

Tab. lxxxiii. *fig.* 12~~1~~3.

Lin. Syſt. 1243. *No.* 667. *Liſt. Angl. tab.* ii. *fig.* 28. *Gualtieri. tab.* iv. *fig.* G. G. *Vortex.* 124. Whirl.
Liſt. Conch. tab. 138. *fig.* 43. *Faun. Suec. No.* 2178.

Sn. with a very flat thin ſhell, and ſix ſmall ſpires. The outmoſt carinated.

Found with the former.

Tab. lxxxiii. *fig.* 124.

Nana. 125. Dwarf.

Sn. with four ſpires; the exterior very large. Thick in proportion to its diameter. Umbilicated.

Whether a young, or a variety of the following?

Tab. lxxxiii. *fig.* 125.

Cornea. 126. HORNY. *Lin. Syſt.* 1243. *No.* 671. *Liſt. Angl. tab.* ii. *fig.* 26. *Gualtieri. tab.* iv. D. D. *Faun. Suec.* 2179.

SN. with four rounded ſpires. Umbilicated; of a horny appearance.

Found in dull deep rivers, and in ponds. The largeſt of the *Britiſh* depreſſed ſpecies.

Tab. lxxxiii.

** Ventricoſe.

Rufeſcens. 127. MOTTLED. Cochlea dilutè rufeſcens, aut ſubalbida, ſinu ad umbilicum exiguo, circinato. *Liſt. Angl. tab.* ii. *fig.* 12.

SN. with four ſpires, and minutely umbilicated; the exterior ſpire ſub-carinated. Of a pale browniſh red mottled with white.

Inhabits woods.

Tab. lxxxv. *fig.* 127.

Pomatia. 128. EXOTIC. Pomatia *Dioſcor. lib.* ii. *c.* 9. *p.* 305. *Geſner. Aq.* 655. *Lin. Syſt.* 1244. *No.* 677. *Liſt. Angl. tab.* ii. *fig.* 1. *Faun. Suec. No.* 2183.

SN. with five ſpires moſt remarkably ventricoſe. Slightly umbilicated. Faſciated with a lighter and deeper brown.

Inhabits the woods of the ſouthern counties of *England.*

A naturalized ſpecies, introduced, as is ſaid, by Sir *Kenelm Digby*; whether for medical purpoſes, or as a food, is uncertain. Tradition ſays, that to cure his beloved wife of a decay was the object.

They are quite confined to our ſouthern counties. An attempt was made to bring them into *Northamptonſhire* *, but they would not live there.

Theſe are uſed as a food in ſeveral parts of *Europe* during *Lent*; and are preſerved in an *Eſcargatoire*, or a large place boarded in, with the floor covered half a foot deep with herbs, in which the ſnails neſtle and fatten †. They were alſo a favorite diſh with the *Romans*, who had their *Cochlearia*, a nurſery ſimilar to the above. *Fulvius Hirpinus* ‡ was the firſt inventor of this luxury, a little before the civil wars between *Ceſar* and *Pompey*. The ſnails were fed with bran, and ſodden wine. If we could credit *Varro* ‖, they grew ſo large, that the ſhells of ſome would hold ten quarts! People need not admire the temperance of the ſupper of the younger *Pliny* §, which conſiſted of only a lettuce a-piece, *three* SNAILS, two eggs, a barley cake, ſweet wine, and ſnow; in caſe his ſnails bore any proportion in ſize to thoſe of *Hirpinus*.

---

* *Morton*, 415.

† *Addiſon's Travels*, 272.

‡ *Pliny*, *lib.* x. *c.* 56.

‖ *De Re Ruſtica*, *lib.* iii. *c.* 14.

§ Epiſt. *lib.* i. *Epiſt.* xv.

Its name is derived not from any thing relating to an orchard, but from Πῶμα, an *operculum*, it having a very ſtrong one. This ſeems to be the ſpecies deſcribed by *Pliny*, lib. viii. c. 39, which he ſays was ſcarce; that it covered itſelf with the opercle, and lodged under ground; and that they were at firſt found only about the maritime *Alps*, and more lately near *Velitræ*.

Tab. lxxxiv. *fig.* 128.

Hortenſis. 129. GARDEN. Cochlea vulgaris major pulla maculata et faſciata hortenſis. *Liſt. Angl. tab.* ii. *fig.* 2. *Gualtieri, tab.* i. *fig.* C. Helix lucorum. *Lin. Syſt.* 1247. *No.* 692. *Liſt. Conch. tab.* 49. *fig.* 47. The common garden ſnail.

SN. in form like the laſt, but leſſer, and not umbilicated and clouded, or mottled with browns.

Theſe are often uſed with ſucceſs in conſumptive caſes.

Tab. lxxxiv. *fig.* 129.

Arbuſtorum. 130. SHRUB. *Lin. Syſt.* 1245. *No.* 680. *Liſt. Angl. tab.* ii. *fig.* 4. *Faun. Suec. No.* 2184.

SN. with a gloſſy ſhell, brown, marked with a ſingle black ſpiral *faſcia*: the rim of the aperture reflects a little. Sub-umbilicated. Varies with deeper and lighter colors.

Inhabits woods.

Tab. lxxxv. *fig.* 130.

Lin. Syſt. 1247. *No.* 691. *Gualtieri. tab.* i. *fig.* P. *Liſt. Conch. tab.* 57. *Liſt. Angl. tab.* ii. *fig.* 3.

Nemoralis.
131. VARIEGATED.

no engr.

Sn. with a gloſſy ſhell; very thin and pellucid. The aperture awry. Varies infinitely: often yellow, or light green, or red faſciated with black or white, along the ſpires. Often quite plain.

Inhabits woods and gardens.

Lin. Syſt. 1247. *No.* 690. *Liſt. Angl. tab.* ii. *fig.* 18. *Conch. tab.* 126. *fig.* 26. *Faun. Suec. No.* 2185.

Vivipara.
132. VIVIPAROUS.

Sn. with ſix ventricoſe ſpires, umbilicated. The aperture almoſt round. Color brown, with duſky ſpiral *faſciæ*.

Inhabits ſtagnant waters, and ſemi-ſtagnant rivers.

Tab. lxxxiv. *fig.* 132.

Lin. Syſt. 1245. *No.* 681. *Gualtieri. tab.* iii. *fig.* L.

Zonaria.
133. ZONED.

Sn. with five ſpires; the firſt very ventricoſe. Slightly umbilicated. Faſciated ſpirally with narrow ſtripes of white, duſky, and yellow.

Inhabits dry banks.

Variety? of the former. A ſhell of a plain color, with the apex a little more projecting. *Fig.* 133. A.

Pellucida.
134. **PELLUCID.**

no engr.

Cochlea terreſtris umbilicata pellucida flaveſcens. *Gualtieri, tab.* ii. *fig.* G.

SN. a very thin pellucid ſhell, of a yellowiſh-green color. Very brittle. With four ſpires, the firſt very tumid.

Found by me only once; in *Shropſhire.*

*** Of a taper Form.

Octona?
135. **EIGHT-SPIRED.**

Lin. Syſt. 1248. *No.* 698. *Gualtieri. tab.* 6. *fig.* B.?

SN. with eight ſpires of a brown color. My ſpecimen was mutilated.

Inhabits ponds.

Tab. lxxxvi. *fig.* 135.

**** Ovated, imperforated.

Stagnalis.
136. **LAKE.**

Lin. Syſt. 1249. *No.* 703. *Liſt. Angl. tab.* ii. *fig.* 21. *Conch. tab.* 123. *fig.* 21. *Faun. Suec. No.* 2188.

SN. with ſix ſpires; the firſt very large and ventricoſe,

coſe, and the laſt quite pointed. Very brittle. Length two inches one eighth.

Inhabits ſtill waters; is, with others of the kind, the food of trouts.

In younger ſpecimens is a duplicature of the ſhell, from the aperture ſpreading along the firſt ſpire; as in *fig.* A. In old ſhells it vaniſhes.

B. Another, which I ſuſpect to be alſo a variety: leſſer and ſomewhat ſtronger. Perhaps the *Helix lineoſa* of *Linnæus*, *No.* 706. *Liſt. Angl. tab.* ii. *No,* 22.

Tab. lxxxvi. *fig.* 136. A. B.

Lin. Syſt. 1249. *No.* 705. *Liſt. Angl. tab.* ii. *fig.* 24. *Conch. tab.* 123. *fig.* 23. *Faun. Suec. No.* 2189.

Putris.
137. Mud.

Sn. with the firſt ſpire vaſtly large and tumid. The two others very ſmall.

Inhabits ponds, &c.

Tab. lxxxvi. *fig.* 137.

Lin. Syſt. 1250. *No.* 708. *Liſt. Angl. tab.* ii. *fig.* 23. *Conch. tab.* 123. *fig.* 22. *Faun. Suec. No.* 2192.

Auricularia.
138. Ear.

Sn. with a very ventricoſe firſt ſpire, ſub-umbilicated. The laſt forms a minute apex. Color yellow. Very brittle.

Inhabits ponds.

Tab. lxxxvi. *fig.* 138.

Lævigatum?
139. Smoothed.

Lin. Syſt. 1250. *No.* 709.

Sn. with only two ſpires: the firſt very ventricoſe; the other very minute, and placed laterally. Of a pale-red color. Pellucid.

Inhabits ponds.

Tab. lxxxvi. *fig.* 139.

Tentaculata.
140. Olive.

Lin. Syſt. 1249. *No.* 707. *Liſt. Angl. tab.* ii. *fig.* 19. *Conch. tab.* 132. *fig.* 32. *Faun. Suec. No.* 2191.

Sn. of an oval ſub-conic form, with five ſpires. Clouded with brown.

Inhabits ponds.

Tab. lxxxvi. *fig.* 140.

NERITA.
NERITE.

XXV. Its animal a Slug.
Shell gibbous, flattiſh at bottom.
Aperture ſemi-orbicular.

Glaucina.
141. Livid.

Lin. Syſt. 1251. *No.* 716. *Liſt. Angl. tab.* iii. *fig.* 10. *Faun. Suec. No.* 2197.

N. with five ſpires, umbilicated. Of a livid color. The ſpires marked with ſhort brown ſtripes; but it varies in colors.

Tab. lxxxvii. *fig.* 141.

Lin. Syſt. 1253. *No.* 723. *Liſt. Angl. tab.* ii. *fig.* 20. *Conch. tab.* 141. *fig.* 38. *Faun. Suec. No.* 2194. *Fluviatilis.* 142. RIVER.

N. with only two ſpires. Brittle, duſky, marked with white ſpots.

Not half the ſize of a pea.

Inhabits ſtill rivers and ſtanding waters.

Tab. lxxxviii. *fig.* 142.

Lin. Syſt. 1253. *No.* 725. *Liſt. Angl. tab.* iii. *fig.* 11, 12, 13. *Conch. tab.* 607. *fig.* 39, &c. *Faun. Suec. No.* 2195. *Littoralis.* 143. STRAND

N. with a thick ſhell, with four ſpires. Generally of a fine yellow. Varies greatly into other colors.

Large as a horſe-bean.

Common at the ſea rocks.

Tab. lxxxvii. *fig.* 143.

XXVI. Its animal a SLUG. *HALIOTIS.*

Shell of the ſhape of a human ear, with a row of orifices along the ſurface.

The ſpire near one end turned in.

Lin. Syſt. 1256. *Liſt. Conch. tab.* 611. *Liſt. Angl. tab.* iii. *fig.* 16. *Tuberculata.* 144. TUBERCULATED.

H. with a rough ſhell, the inſide like mother-of-pearl.

Inhabits the ſea near *Guernſey*; alſo frequently caſt up on the ſouthern ſhores of *Devonſhire.* When living adheres to rocks.

This was the λεπας αγρια, the wild limpet, and θαλλαττιον ȣ̃ς, the ſea ear of *Ariſtotle* *.

Tab. lxxxviii. *fig.* 144.

DIV. IV. UNIVALVE SHELLS.

Without a regular ſpire.

***PATELLA.* LIMPET.**

XXVII. Its animal a SLUG.
Conic ſhell, without ſpires.

Vulgata.
145. COMMON.

Lin. Syſt. 1258. *No.* 758. *Liſt. Angl. tab.* v. *fig.* 40. *Faun. Suec. No.* 2199.

P. with rough prominent *ſtriæ*, and ſharply crenated edges. Vertex pretty near the centre. The edges often in old ſubjects are almoſt ſmooth.

Tab. lxxxix. *fig.* 145.

Depreſſa.
146. FLAT.

Liſt. Conch. tab. 538. *fig. inf.*

P. much depreſſed; the vertex approximating nearly to one edge. More oblong than the former.

Tab. lxxxix. *fig.* 146.

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* *Hiſt. An. lib.* iv. *c.* 4.

Lin. Syſt. 1259. *No.* 761. *Gualtieri. tab.* ix. *fig.* vv. *Hugarica.*
147. BONNET.

P. with a white acuminated ſtriated ſhell, the top turning down like a *Phrygian* bonnet.

Tab. xc. *fig.* 147.

Patella vertice intorto, &c. *Gualtieri. tab.* ix. *fig.* 10. *Intorta.*
148. INCLINING.

P. with an elevated ſhell, ſlightly ſtriated; the vertex bending, but not hooked.

Inhabits *Angleſea.* Found on the ſhores

Tab. xc. *fig.* 148.

Lin. Syſt. 1260. *No.* 769. *Liſt. Angl. tab.* ii. *fig.* 32. *Conch. tab.* 141. *fig.* 39. *Faun. Suec. No.* 2200. *Lacuſtris.*
149. LAKE.

no engr.

P. with a ſhell almoſt membranaceous; the top reclined.

Inhabits freſh waters.

Lin. Syſt. 1260. *No.* 770. *Liſt. Conch. tab.* 543. *fig.* 27. *Pellucida.*
150. TRANSPARENT.

P. with a pellucid ſhell, marked longitudinally with rows of rich blue ſpots. The vertex placed near one edge.

Inhabits the ſea rocks of *Cornwall.*

Tab. xc. *fig.* 150.

Lævis.
151. Smooth

Patella lævis fuſca. *Liſt. Conch. tab.* 542. *fig.* 26.

P. with a ſmooth and gloſſy ſhell, ſomewhat depreſſed; the apex inclining.

Found on the ſhores near *Bamff.*

Tab. xc. *fig.* 151.

Fiſſura.
152. Slit.

Lin. Syſt. 1261. *No.* 778. *Liſt. Conch. tab.* 543. *fig.* 28.

P. with a white ſhell, of an elevated form, vertex inclining; elegantly ſtriated and reticulated. Has a remarkable ſlit in front.

Inhabits the ſeas of the Weſt of *England.*

Tab. xc. *fig.* 152.

Græca?
153. Striated.

Lin. Syſt. 1262. *No.* 780. *Liſt. Conch. tab.* 527. *fig.* 2.

P. with an oblong ſhell, perforated vertex, ſtriated roughly to the edges.

Inhabits the Weſt of *England.*

Tab. lxxxix. *fig.* 153.

This genus was called by the *Greeks* λεϖας, and is mentioned by *Ariſtotle* and *Athenæus* *; who acquaint us, that it was uſed for the table; and alſo inform us of its nature of adhering to rocks. *Ariſtophanes* with much humour ſpeaks of an old woman who ſtuck as cloſe to a young fellow as a *Lepas* to a rock.

---

* *Ariſtot. Hiſt. An. lib.* iv. *c.* 4. *Athenæus, lib.* iii. *p.* 85.

Linnæus has adopted the *Latin* name of *Patella*, a ſort of diſh; and has applied it (as ſome other modern writers have before) to this genus.

DENTALIUM.
TOOTH-SHELL.

XXVIII. Its animal a Terebella.
A ſlender tubiform ſhell.

Entalis.
154. Common.

Lin. Syſt. 1263. *No.* 786. *Liſt. Conch. tab.* 547. *fig.* 2. *Faun. Suec. No.* 2201.

D. with a ſlender ſhell, a little bending. Pervious.
Length near an inch and a half.
Inhabits moſt of our ſeas.
Tab. xc. *fig.* 154.

SERPULA.

XXIX. Its animal a Terebella.
Tubular ſhell adhering to other bodies.

Spirorbis.
155. Spiral.

Lin. Syſt. 1264. *No.* 794. *Faun. Suec. No.* 2204.

S. with a ſhell ſpiral or wreathed, like the *cornu ammonis*.

Very ſmall; adhering to ſhells, *cruſtacea* and *algæ*. *Tab.* xci. *fig.* 155.

Triquetra. 156. ANGULAR. *Lin. Syſt.* 1265. *No.* 795. *Faun. Suec. No.* 2206.

no engr.

S. with a triangular ſhell, irregularly twiſted.

Adheres to (in a creeping form) ſtones and other ſubſtances.

Intricata. 157. COMPLICATED. *Lin. Syſt.* 1265. *No.* 796.

S. with a ſlender ſhell greatly entwined.

Adheres to ſhells, &c. moſt intricately twiſted. *Tab.* xci. *fig.* 157.

Contortuplicata. 158. TWINED. *Lin. Syſt.* 1266. *No.* 799. *Liſt. Conch. tab.* 29. *fig.* D. *Faun. Suec. No.* 2205.

S. with a ſtrong, rugged, angulated ſhell, entwined.

Adheres to ſhells, &c. *Tab.* xci. *fig.* 158.

Vermicularis. 159. WORM. *Lin. Syſt.* 1267. *No.* 805. *Ellis Coral. tab.* xxxviii. *fig.* 2.

no engr.

S. with a ſlender, incurvated, taper, and rounded ſhell.

According to Mr. *Ellis*, inhabits all our coaſts. Its

TEREDO. PIERCER.

Its animal a TEREBELLA.
Shell ſlender, bending.

Navalis. 160. SHIP.

Lin. Syſt. 1267. *No.* 807. *Faun. Suec. No.* 2087.

Juſtly called by *Linnæus calamitas navium.* Was imported from the *Indies.* Penetrates into the ſtouteſt oak plank, and effects their deſtruction.

SABELLA.

XXX. Its animal a NEREIS.
A tubular covering, fabricated with ſand and broken ſhells, coherent by a glutinous cement.

Rudis. 161. COARSE.

Lin. Syſt. 1268. *No.* 811. *Baſter ſubſeſ.* 1. *p.* 80. *tab.* 9. *fig.* 4.

S. with a ſingle caſe formed of larger fragments of ſhells, with little or no ſand.

Found near *Weymouth*, lodged in the ſhell of a bivalve. The animal is repreſented magnified in *Tab.* xxvi. marked A. A.

Alveolata. 162. HONEYCOMB.

Lin. Syſt. 1268. *No.* 812. *Ellis Coral. tab.* xxxvi. *p.* 90.

S. with numerous tubes placed parallel; with the orifices open, forming in the maſs the appearance of the ſurface of honey-combs: compoſed chiefly of ſand, with very minute fragments of ſhells. The tubes ſometimes above three inches long.

Found on the weſtern coaſts of *Angleſea*; near *Cricceth*, *Caernarvonſhire*; and near *Yarmouth*. It covers the rocks for a conſiderable ſpace near low-water mark.

Tab. xcii. *fig.* 162.

Tubiformis.
163. **Tube.**

Nereis cylindracea belgica. *Pallas. Miſc. Zool. p.* 211. *tab.* ix. *fig.* 3.

S. with a caſe of a taper ſtrait form; made up of minute particles of ſand, moſt elegantly put together.

Its animal deſcribed at *No.* 34.

Common on all our ſandy ſhores.

Tab. xcii. *fig.* 163.

FINIS.

ERRATA.

Page 36.	—	*For* Sipunculus	*read* Siphunculus.
74.	—	— Barnacle	— Bernacle.

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CORRECTIONS of the SPELLING in the WELSH NAMES of REPTILES and FISHES, in Vol. III. BRITISH ZOOLOGY, with ſome Additions thereto, by RICHARD MORRIS, ESQ.

No.

5. LLyffant gwyllt.
6. Llyffant mawr.
7. Genau goeg gennog.
11. *For* naredig, *read* nadreddig.
12. *For* du, *read* ddu.
14. Neidr Aberdeen.
19. *For* Trwngrwn, *read* Trwyngrwn.
20. —— trwynfain.
21. —— penbwl.
23. *For* aden, *read* adain.
25. *For* Llamhydydd, *read* Llamhidydd.
27. *For* bendol, *read* bendoll.
29. Llamprai'r llaid.
32. Moreath arw.
33. Ceffyl Gwyn.
34. Morcath ffreinig.
35. ——— gynffon gwialen.
36. *For* Swithbyſg, *read* Swrthbyſg.
38. *For* Cefn, *read* lefn.
40. *For* Pegod, Picewd, *read* Pigog, Piccwd.

No.

41. Heulgi.
42. *For* gwin, *read* gwyn.
46. *dele* Morgi mawr.
47. Morgi lleiaf.
49. Corgi môr.
50. Morgi mawr.
53. *For* Iſtwrſion, *read* Yſtwrſion.
55. —— byrr.
56. —— crothog.
59. —— leiaf.
60. Pibellbyſg hir.
61. ——— byrr.
64. *For* Llyſowen, *read* Lyſowen.
69. Morddraig emmog.
70. ——— ſalw.
72. ——— fawr.
78. *For* chwetlyn, *r.* chwitlyn.
82. —— fforchogfarf
83. ——————— lleiaf.
86. *For* Llefen, Llefenan, *read* Llofen, Llofenen.
87. Codſyn farf teirfforch.
88. ———— pumfforch.

CORRECTIONS OF THE SPELLING.

No.

90. Llyſnafeddbyſg cribog.
92. Cleirach gwymmon.
93. Gwrachen fair.
95. Craigbyſg du.
96. ———— brych.
99. Sarph y môr.
101. Brenhinbyſg.
104. *For* 'ddu, *read* ddu.
106. Lleden iraidd.
108. Lleſn Dafod yr Hydd.
111. Lleden arw ſafnrwth.
113. *For* Brôm, *read* Brêm.
114. Eurben danheddog.
118. Gwrach rengog.
119. ——— geſngrwm.
123. Côgwrach.
126. Perc y môr.
127. Y Garwberc.
128. ————— du.
133. *For* Sopaen, *read* Yſpaen.
134. Macrell y meirch.
136. ——— rhengog.
139. *For* Pibyd, *read* Pibydd.
141. Penhaiarn rheſtrog.
143. *Dele* Talieſin.
145. Brithyll y môr.
147. ——— gwyn.
152. *For* Gwiniad, *read* Gwyniad.
156. Arianbyſg.
159. Ehedbyſg.
167. *For* Iſgretten, *read* Yſgretten.
168. *For* Crothel, *read* Crothell.

No.

173. *For* Golenbyſg, *read* Goleubyſg.
177. *For* Crothel, *read* Crothell.
178. Eurbyſg.
179. Môrfalwen ddeuſann.

Page.

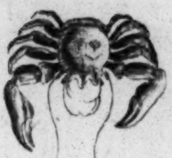
246. *For* Fernch, *read* French.
256. *For* Raithlyn, *r.* Rhaithlyn.
299. *For* Llyndivi, *read* Llynteifi.
—— *For* Eynion, *r.* Einion.
—— *For* Machyntleth, *read* Machynllaeth.
—— *For* Merionethſhire, *read* Montgomeryſhire.
301 *For* Llynallet, *read* Llynaled.
307. *For* Llynberis, *read* Llynperis.
316. *For* Gwiniad, *read* Gwyniad.
317. 318. Ditto, and in running title of four pages, and index.
396. *For* Cythrawl, *read* Gythraul.
414. Dragonet, 264, *read* 164.

For Welch, *read* Welſh, throughout.

White Bait, not in Catalogue. Yr Abwyd Gwyn.

Pl. I. Cl. V.

3



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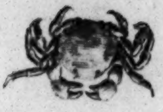

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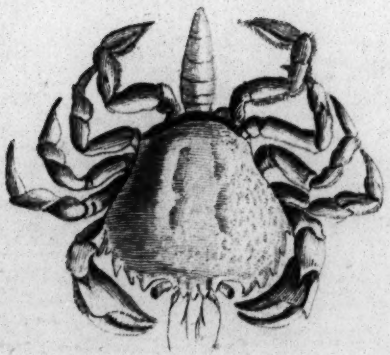

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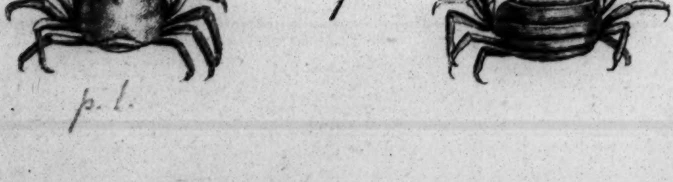

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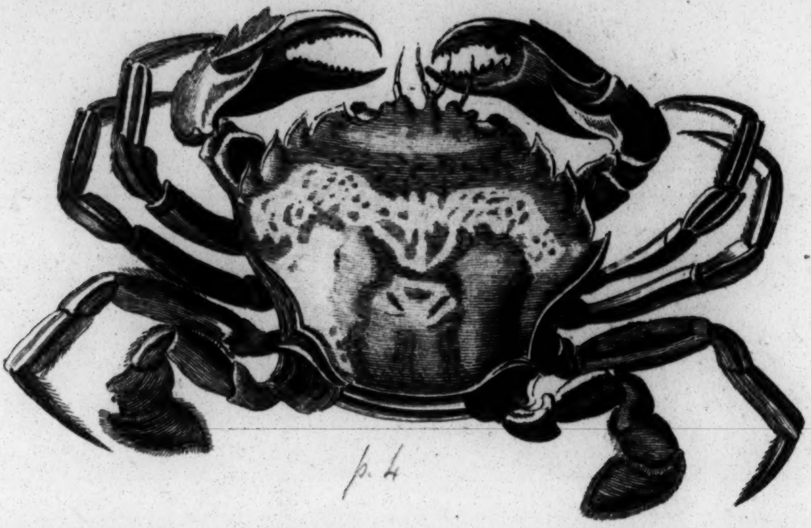
Pl. II.

Cl. V.

6.



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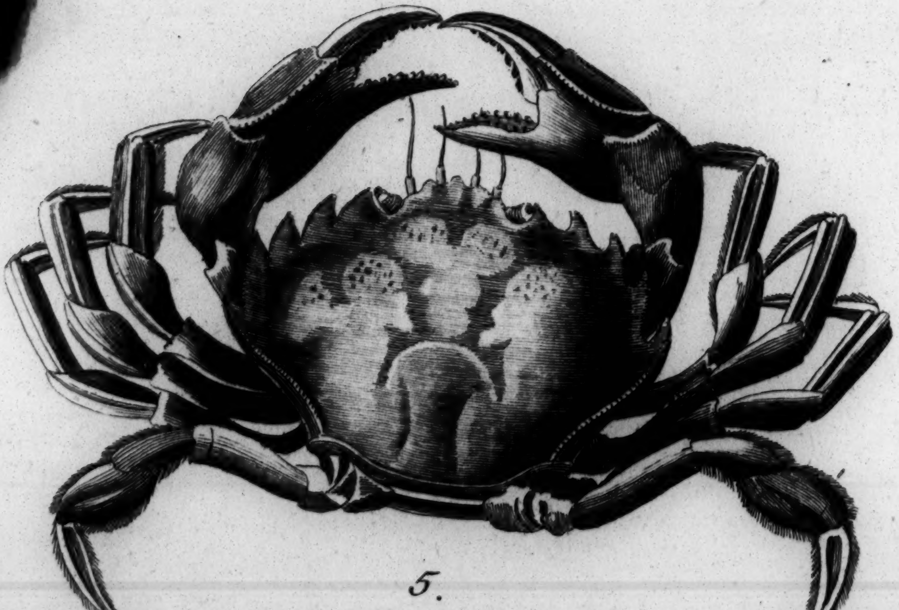

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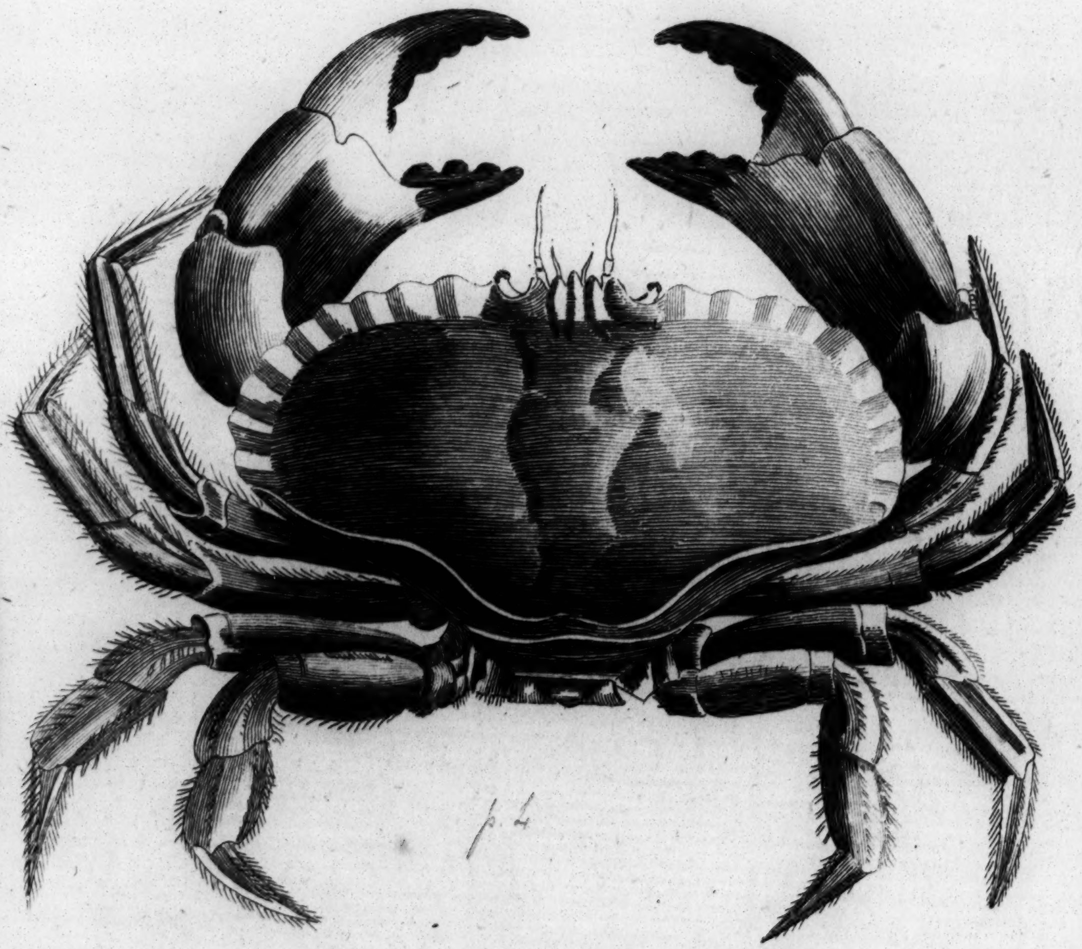

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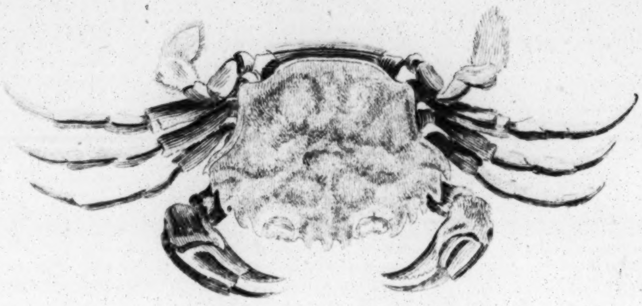
A. VI.



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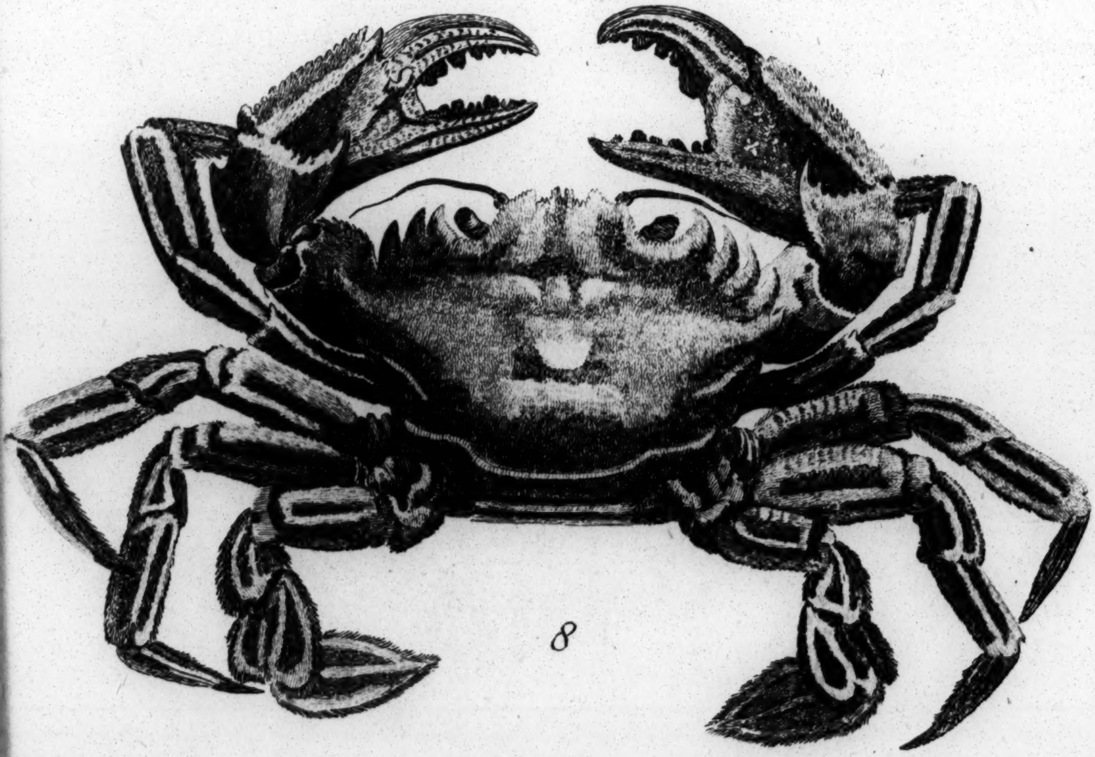

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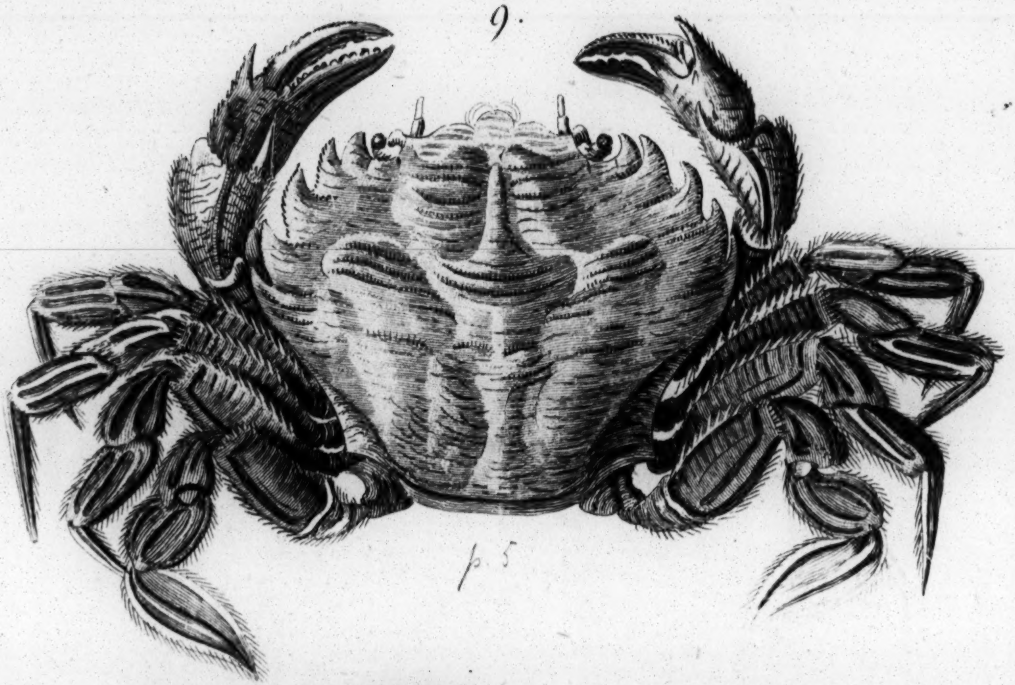

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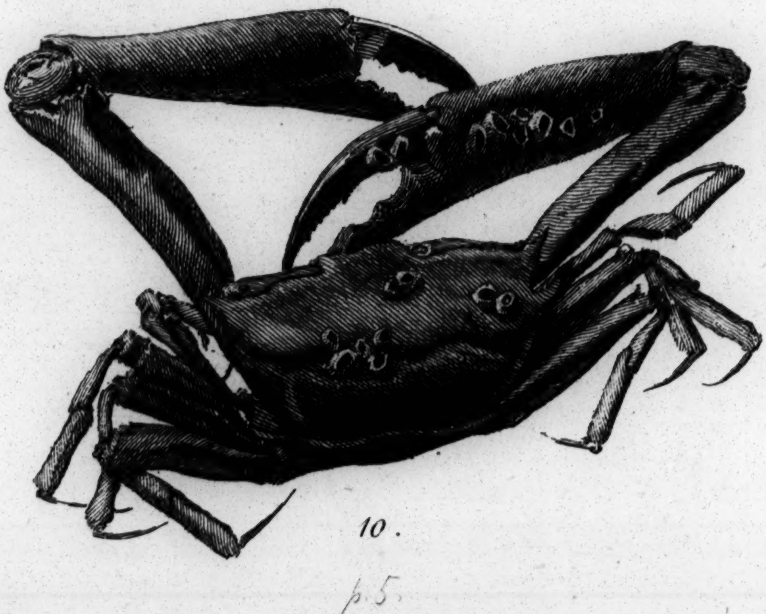

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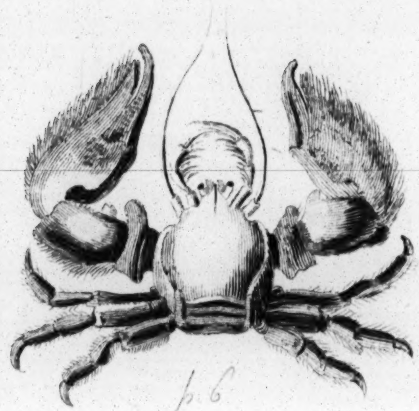

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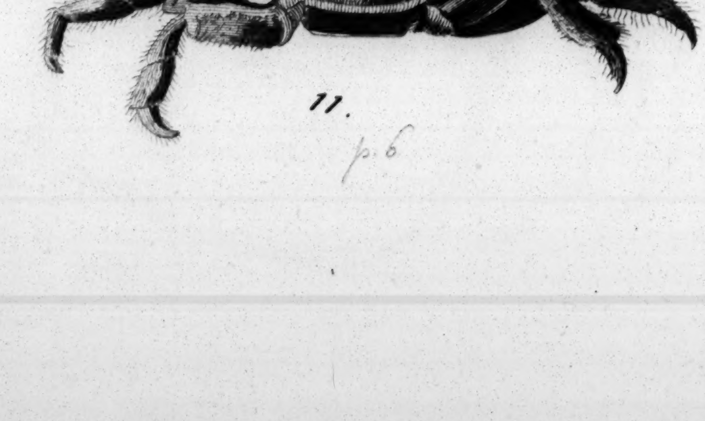

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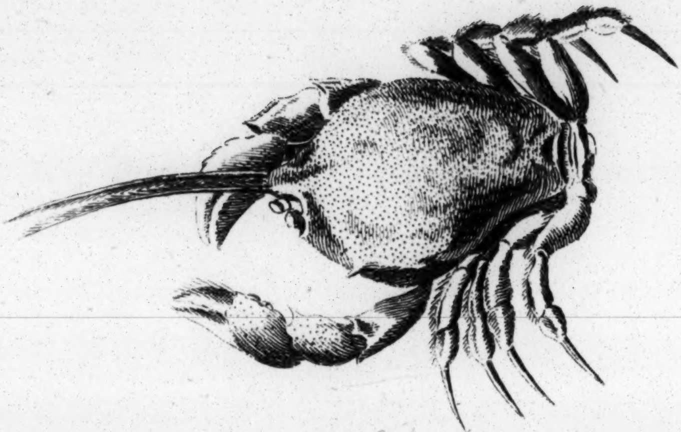
Pl. VII. Cl. V.



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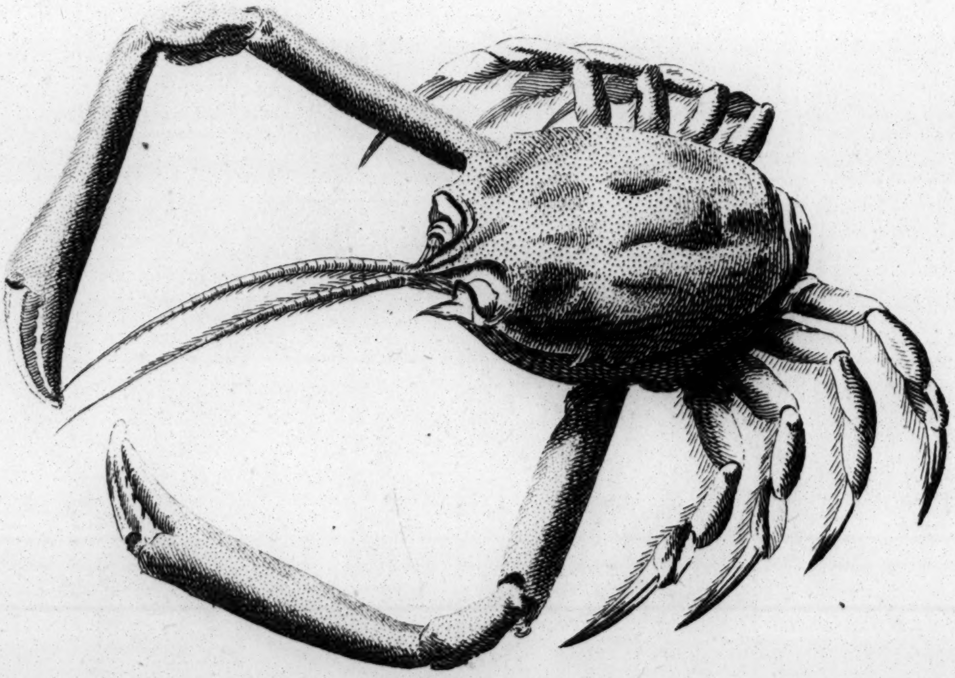
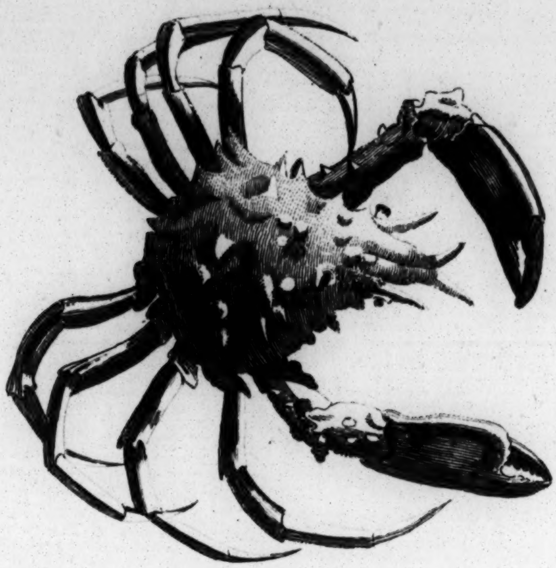


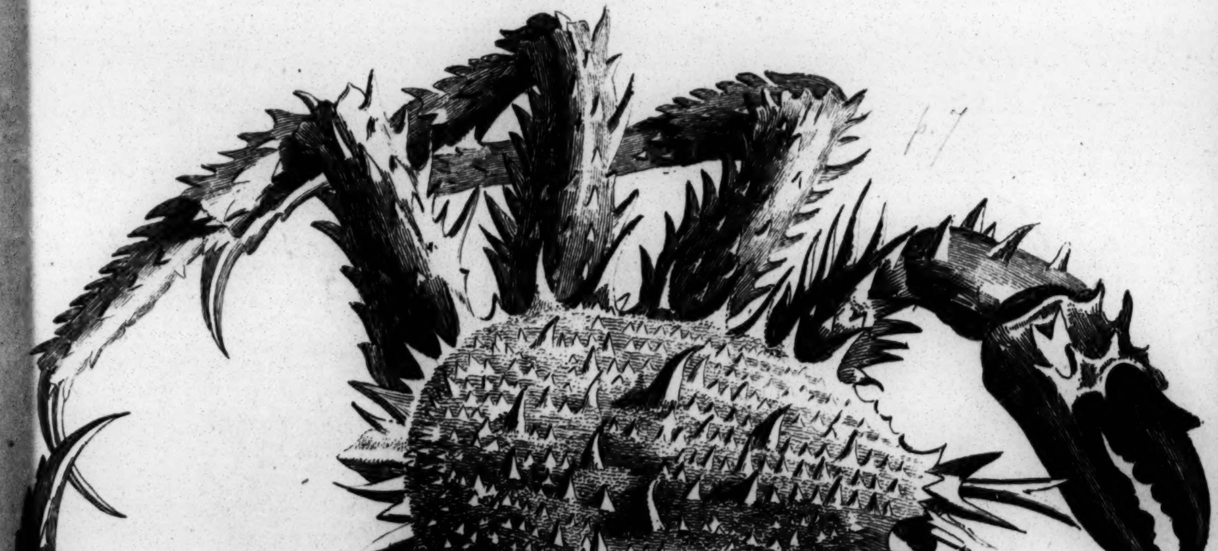
p. 6 male

Pl. VIII.

Cl. V.

15.





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Pl.IX.

Cl.V.

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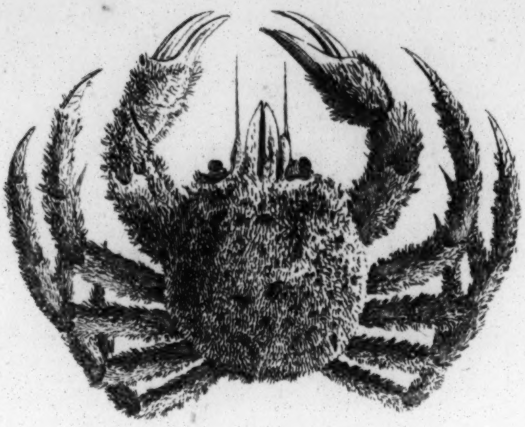

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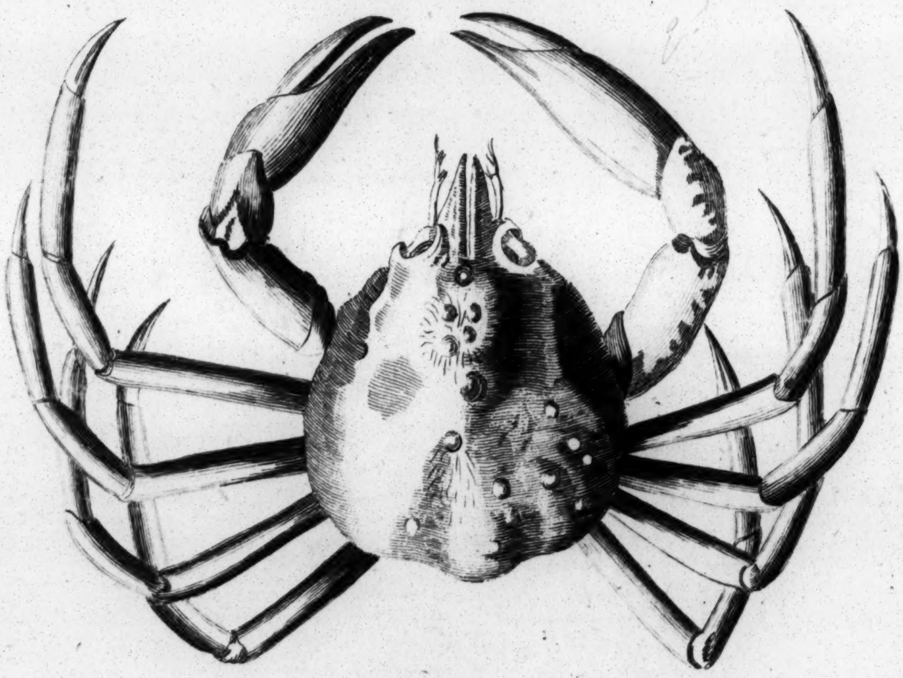

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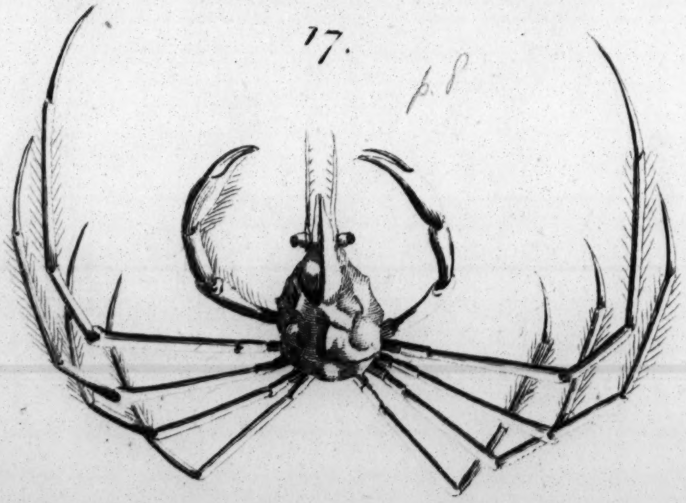

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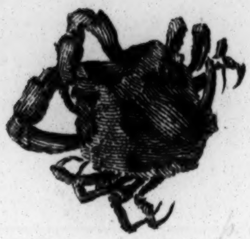

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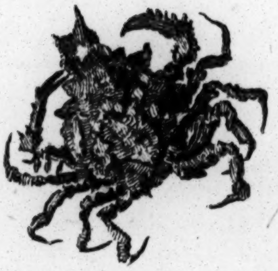

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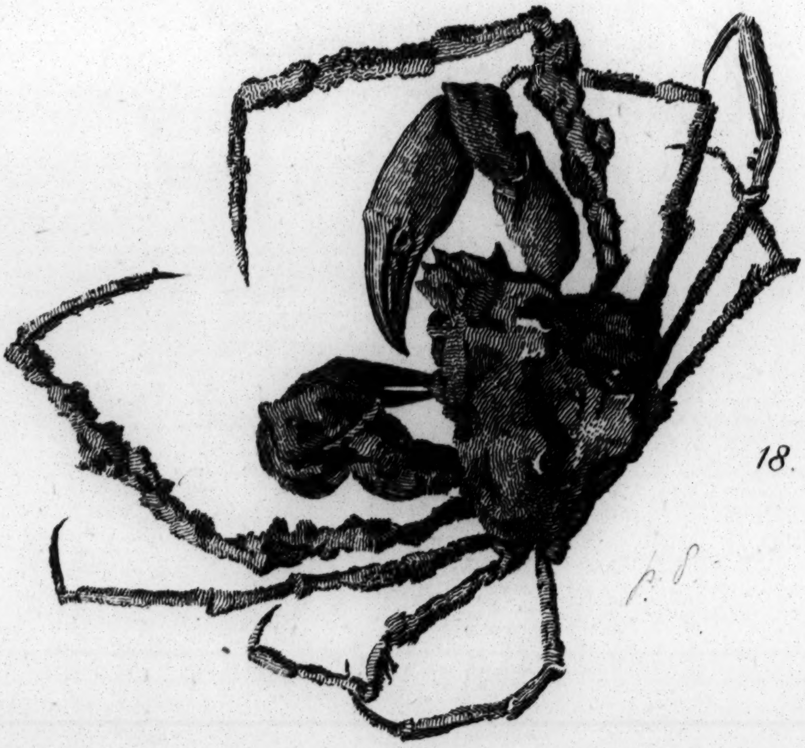

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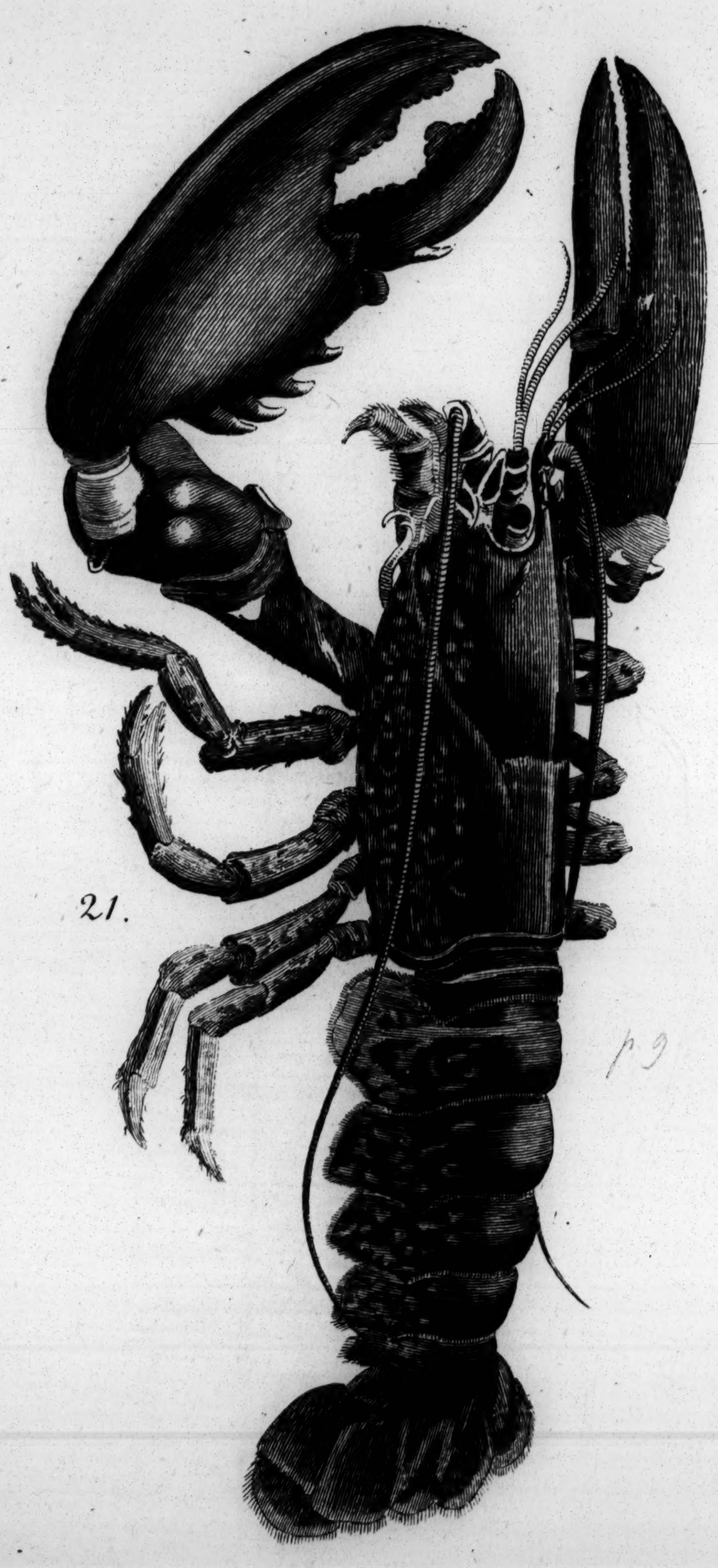
Pl. X.

Cl. V.



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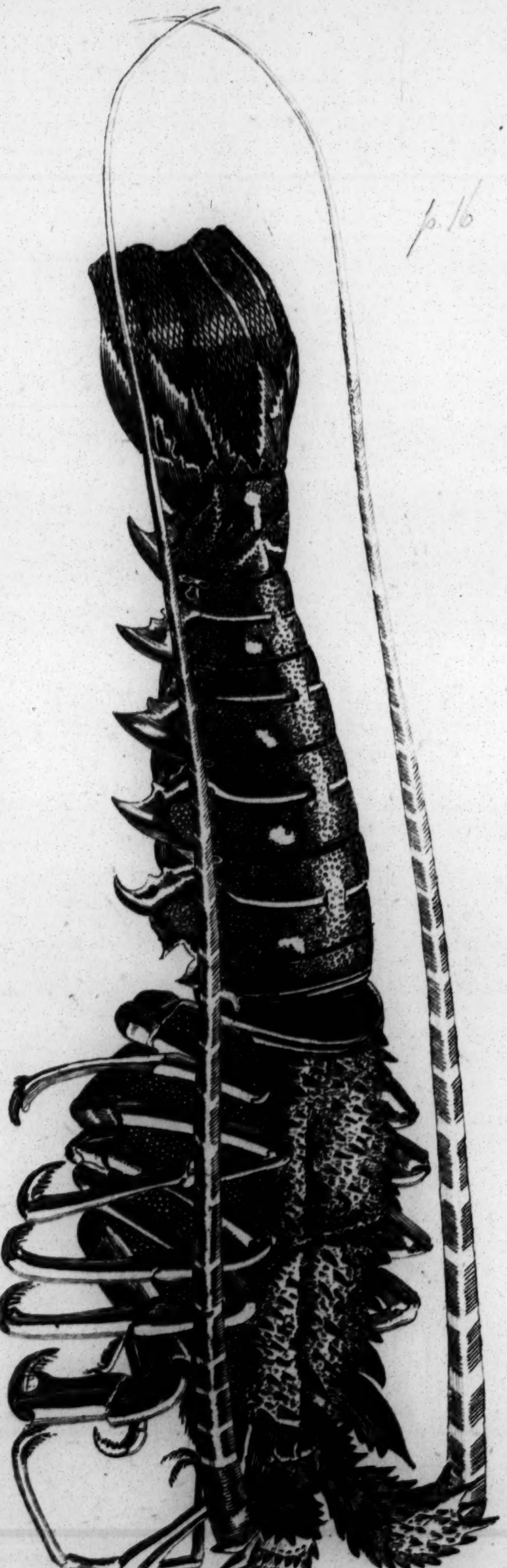

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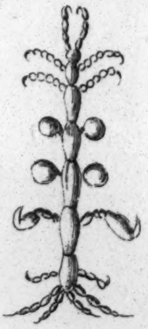

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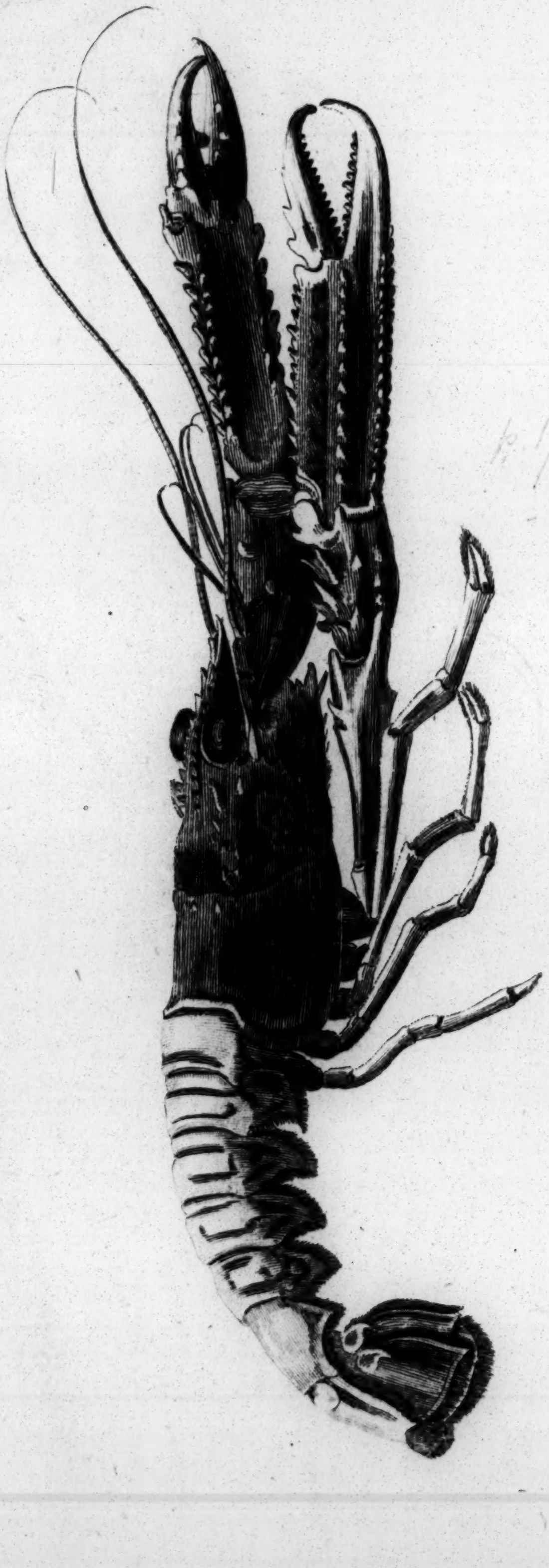

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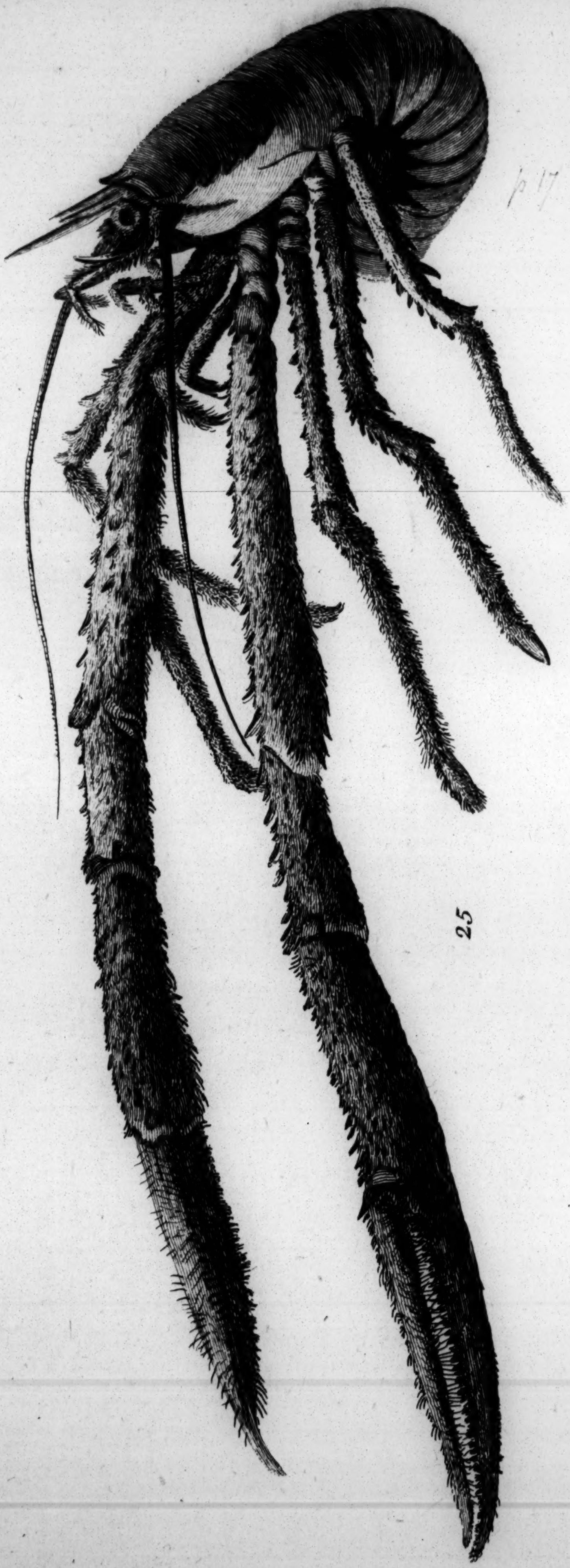

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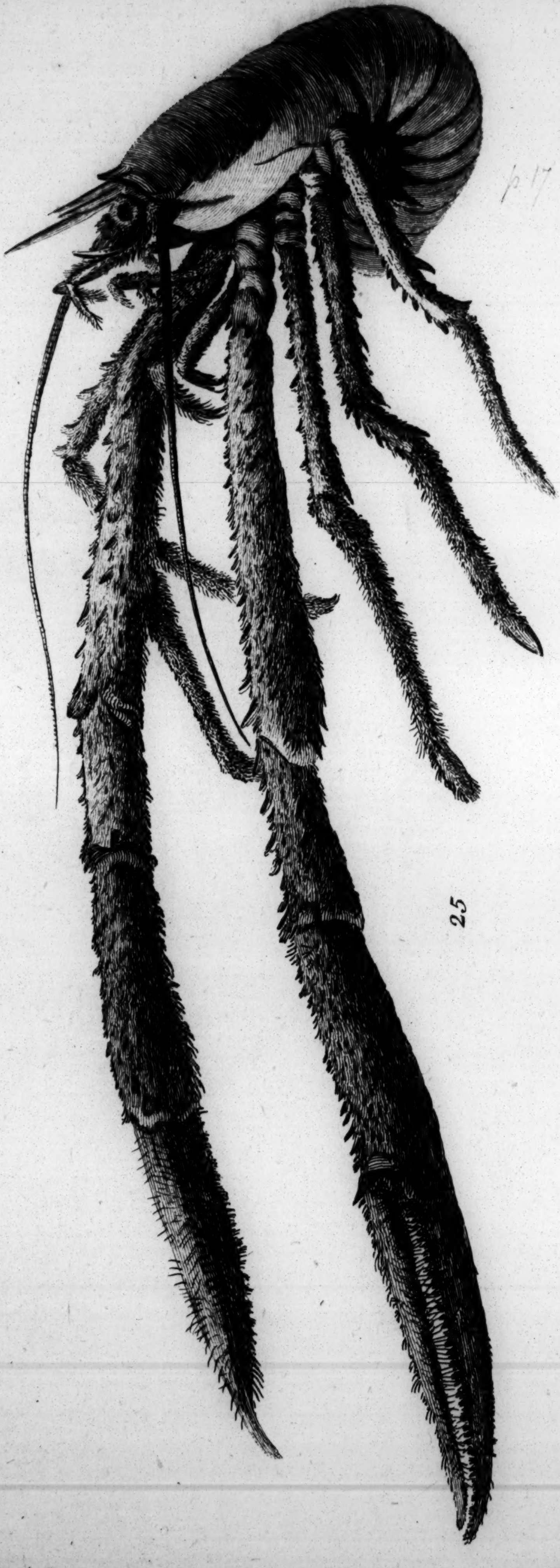

Pl.XIV, cl.V.

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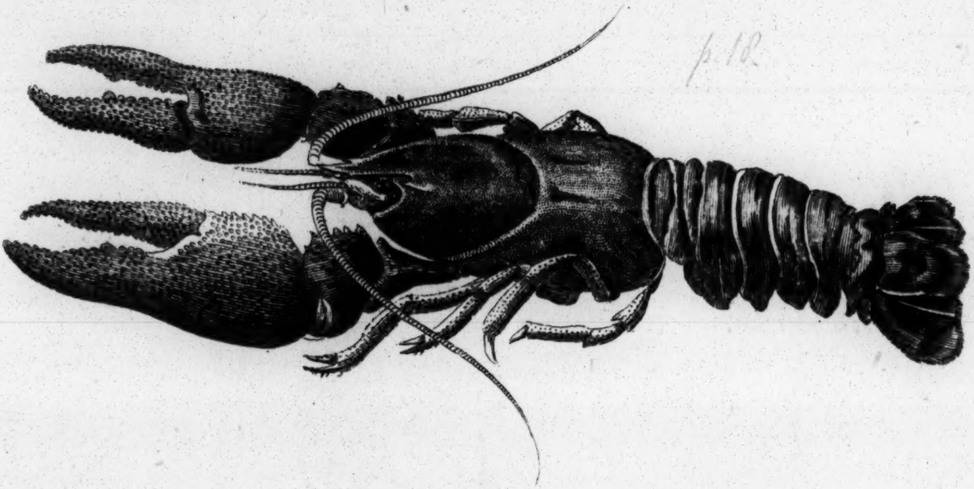

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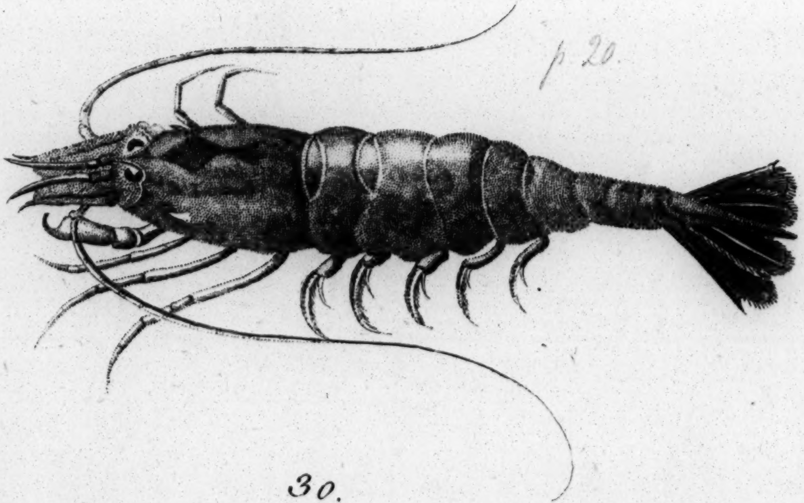

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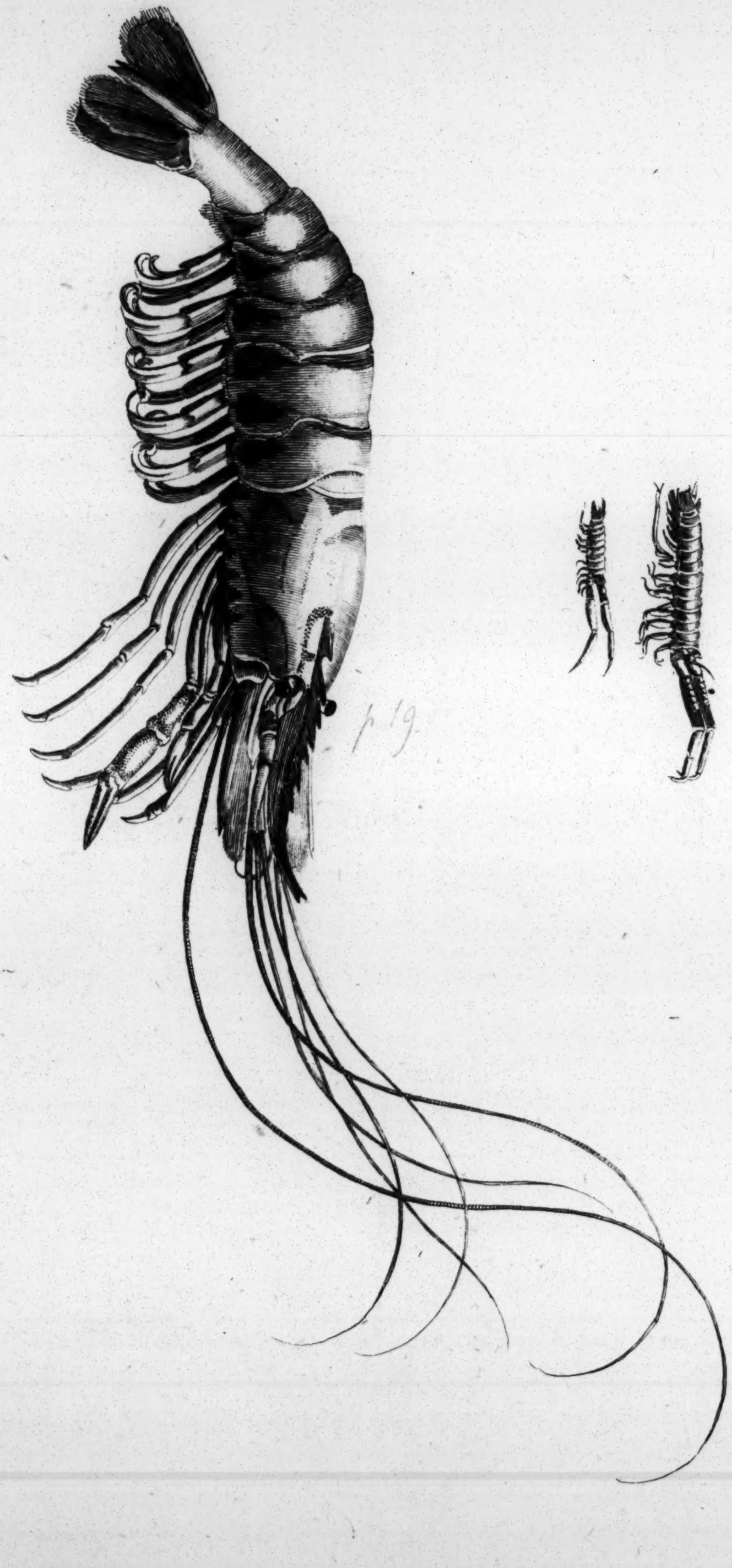
30.

Pl. XVI.

Cl. v.



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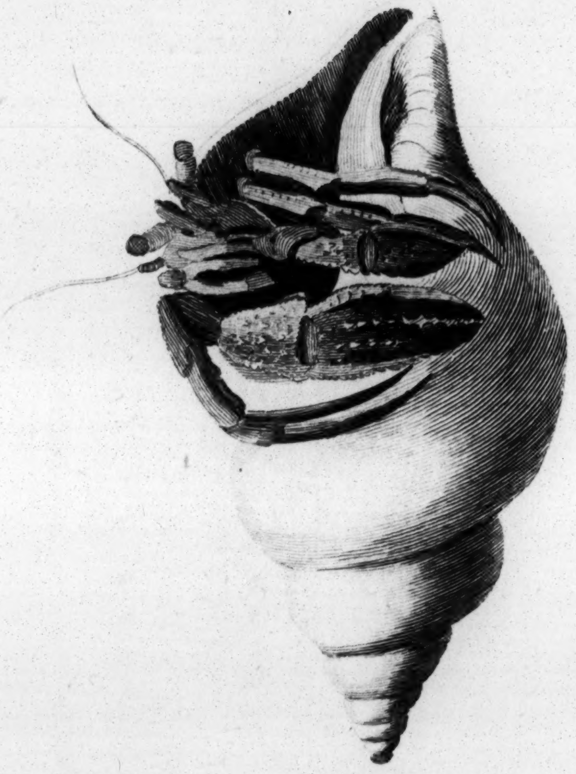
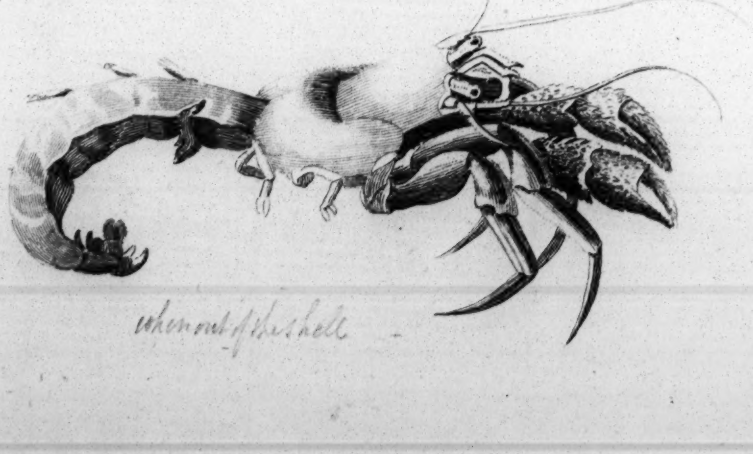
Pl. XVII. Cl. V.



38. p 23

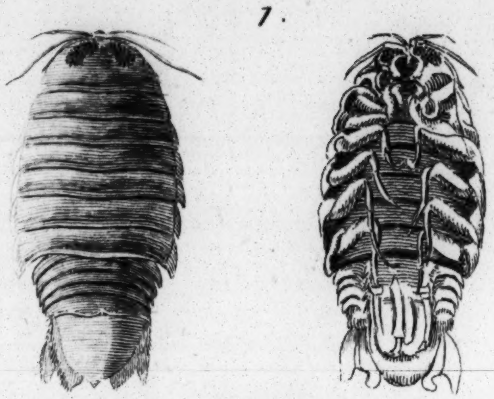


when out of the shell

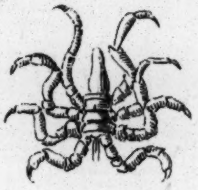
Pl. XVIII.

ONISCI. &c. Not described

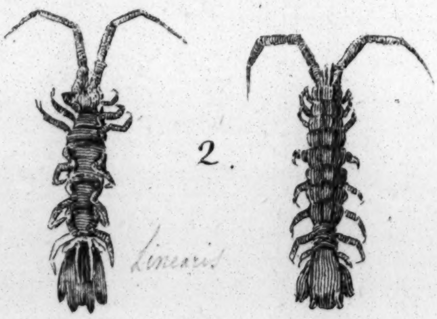
1.



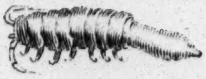
Psora



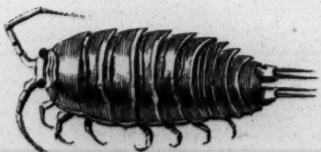
7. phalangium balanae



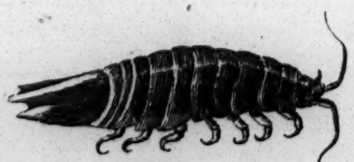
2. Linearis



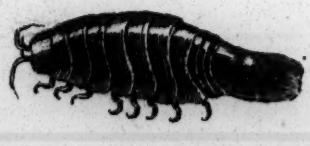
3. Marinus



4. Oceanicus

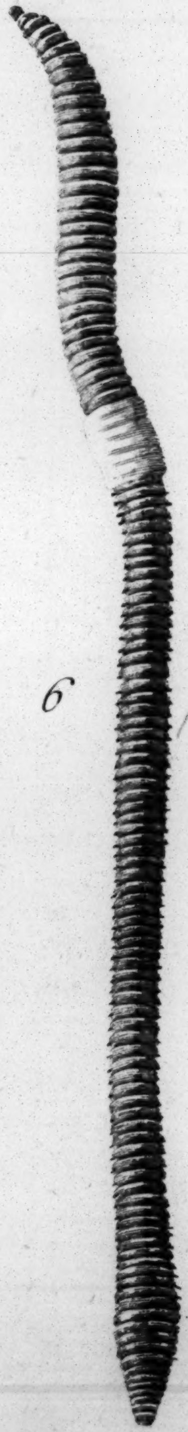


5. Entomon

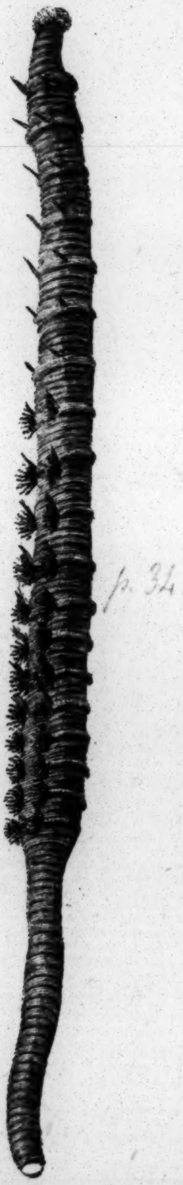


6. Oestrum

Pl. XIX. Cl. VI.



6 p. 33



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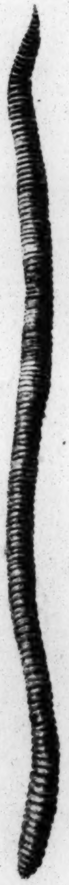

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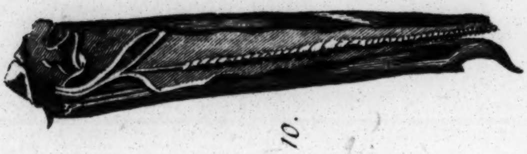

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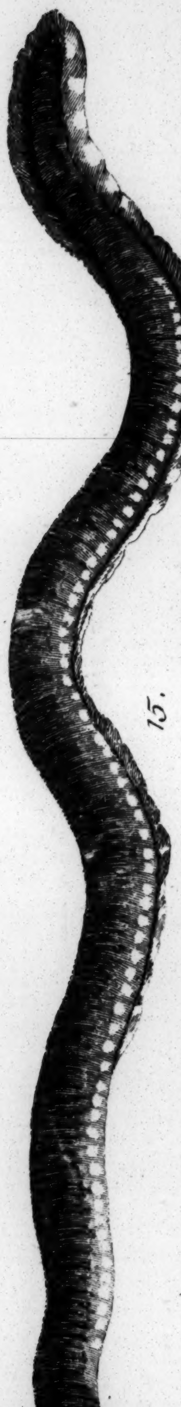

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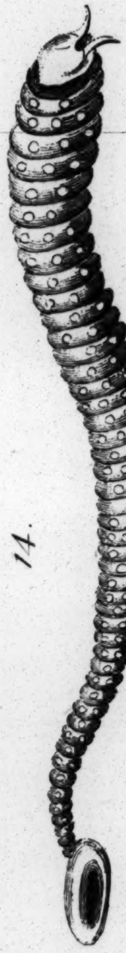

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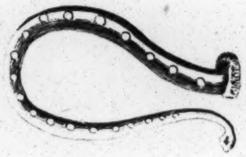


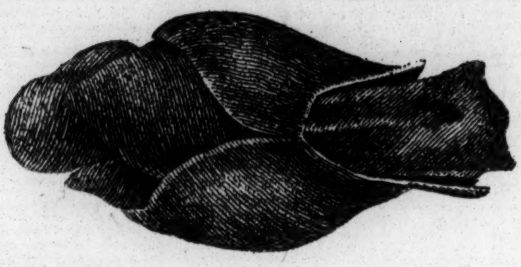
13. p. 38

3. marine hair worm not described

13.

10.

p. 36. q. its larva above No 10?



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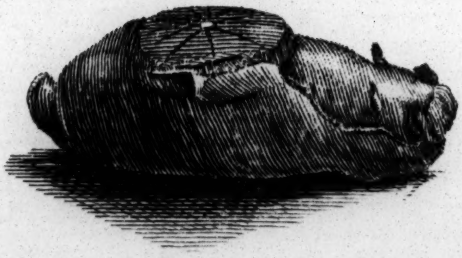
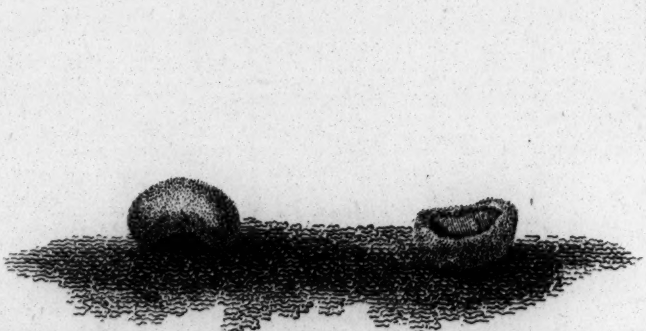
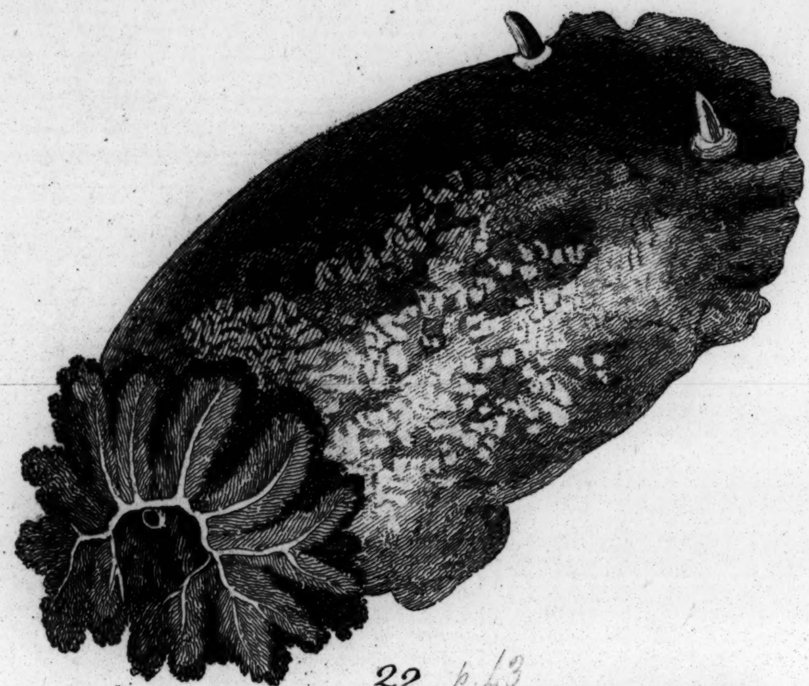


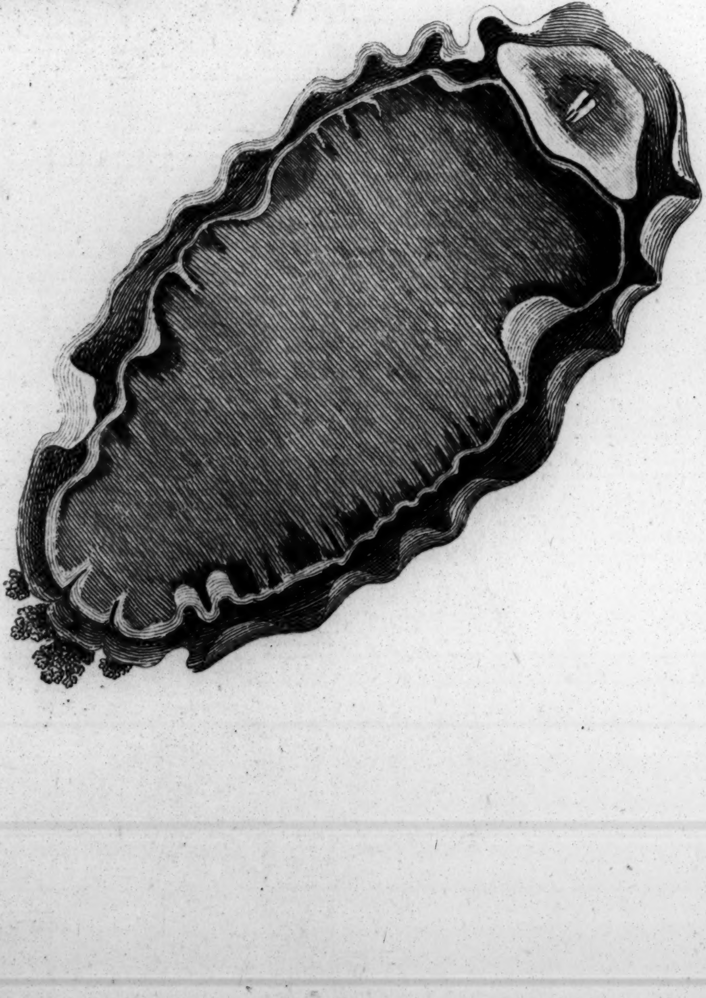


23 p.43

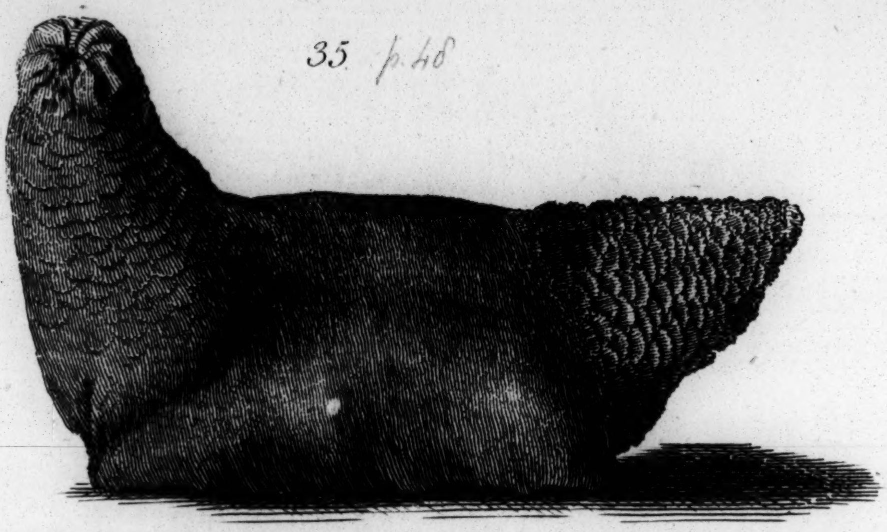
Pl. XXII. Cl. VI.



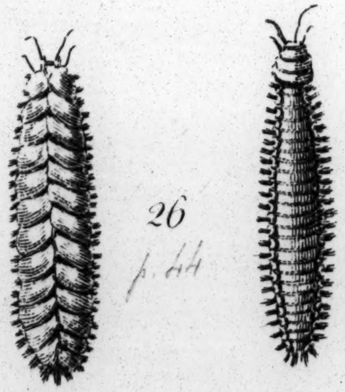
22. p.43



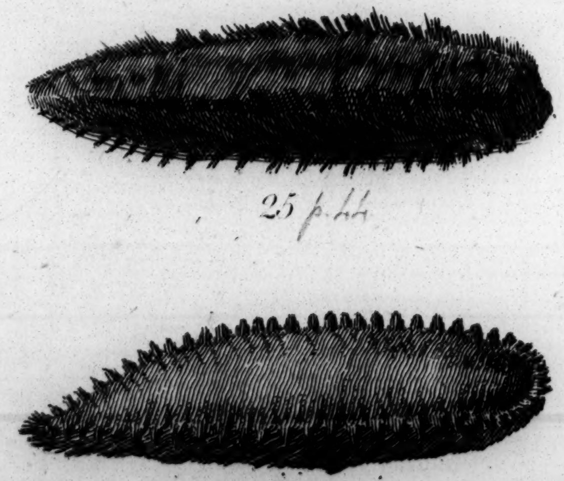
XXIII. Cl. VI.



35 p.48



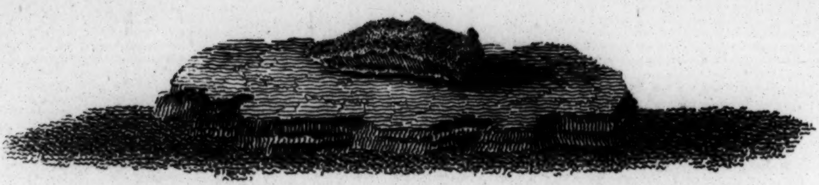
26 p.44



25 p.44

XXIV. Cl. VI.

24. p. 43



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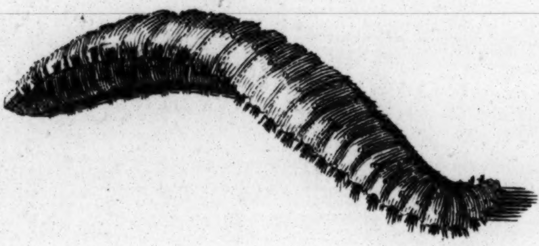
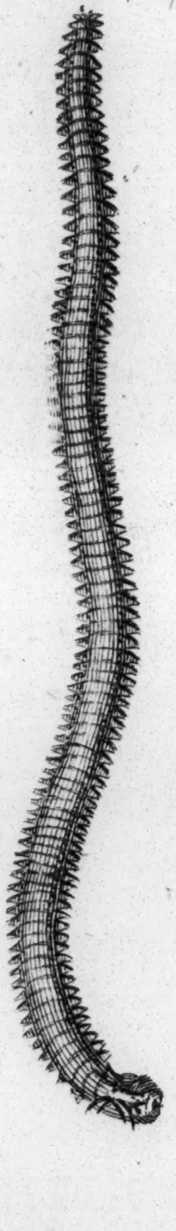


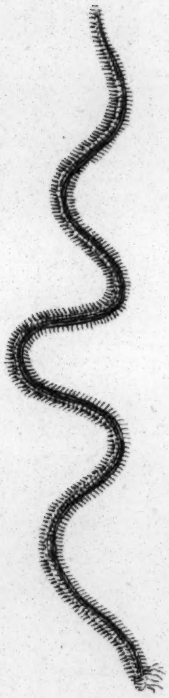
29. p. 45

27. p. 45

XXV.

32. p.47

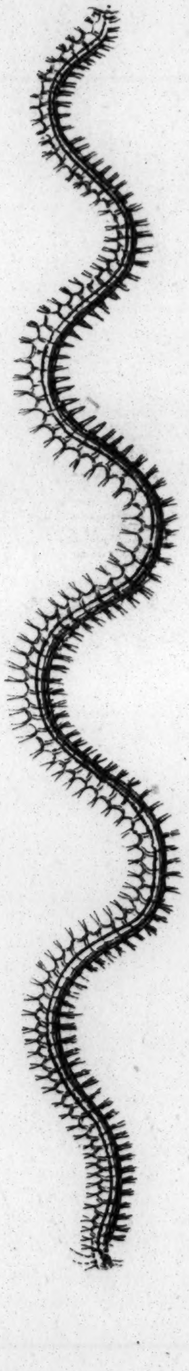




III

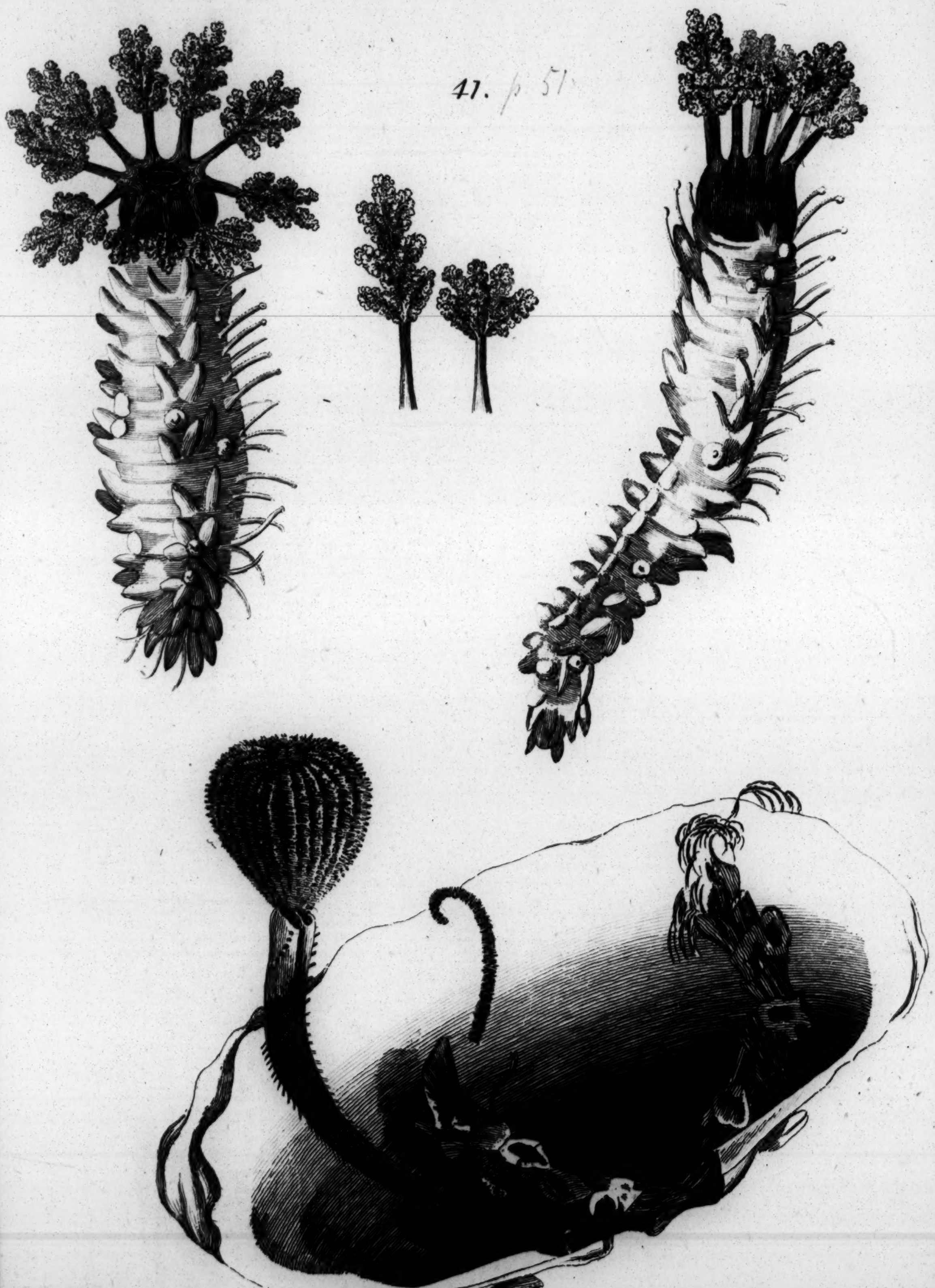
scolopendra marina
not described

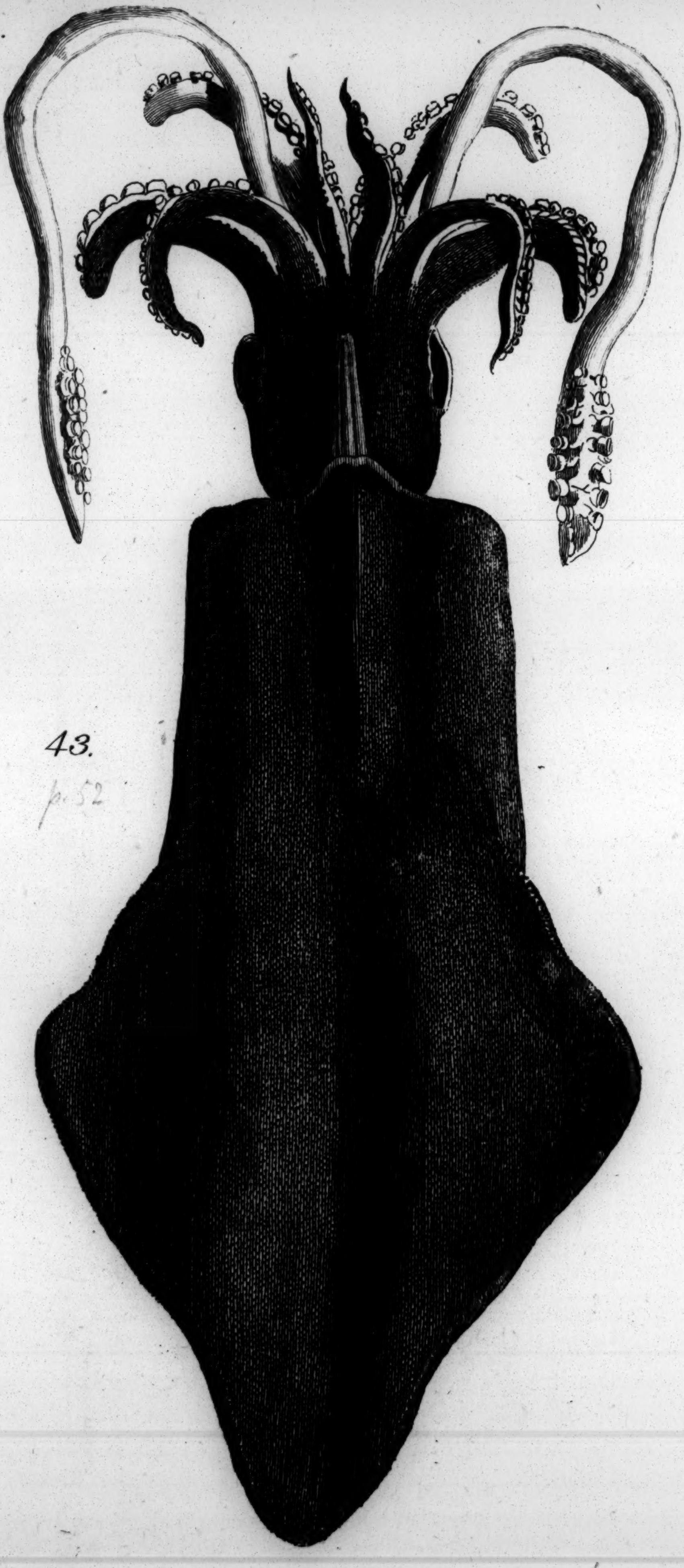
33. p.47



Pl.XXVI Cl.VI.

41. p 51





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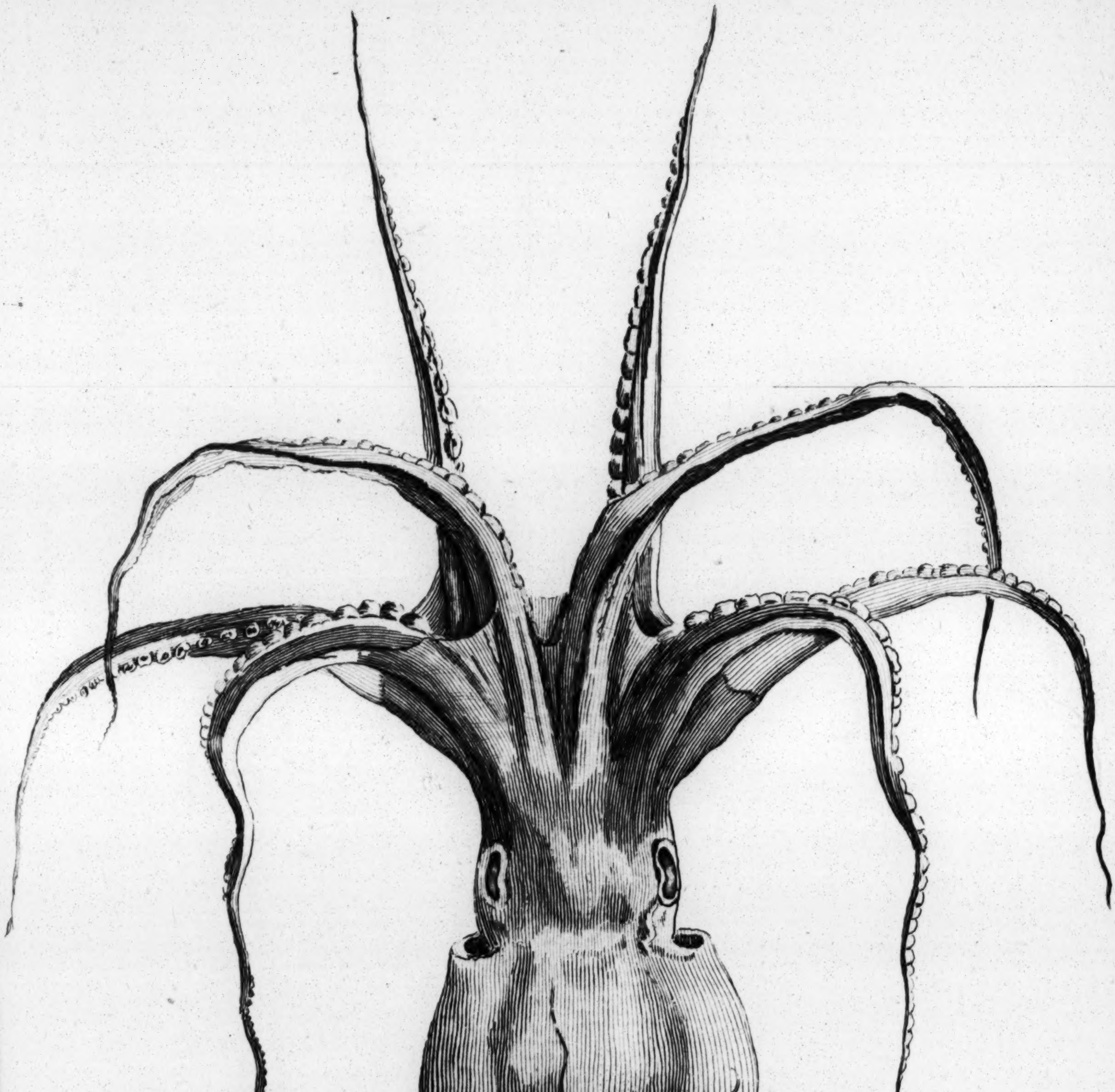
p. 52



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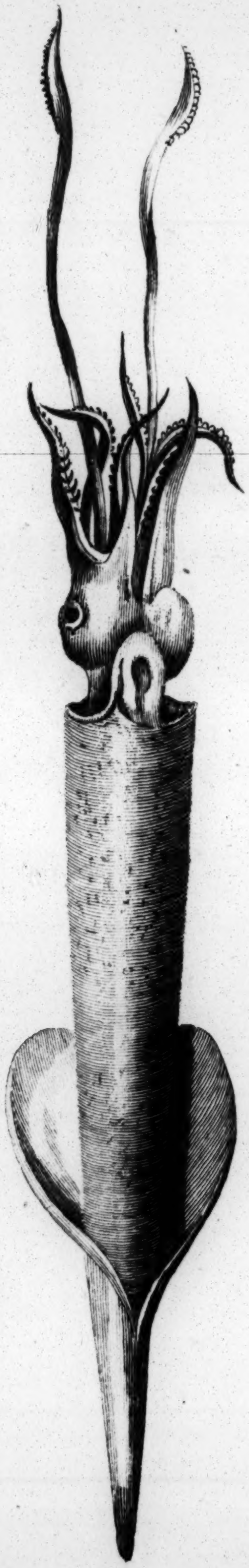

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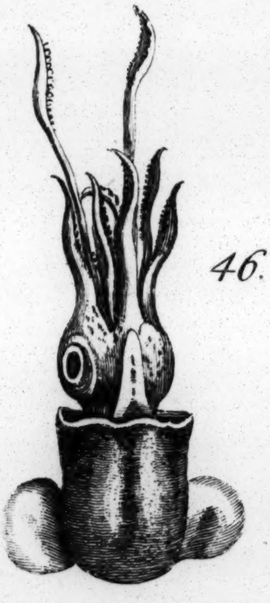
p. 54

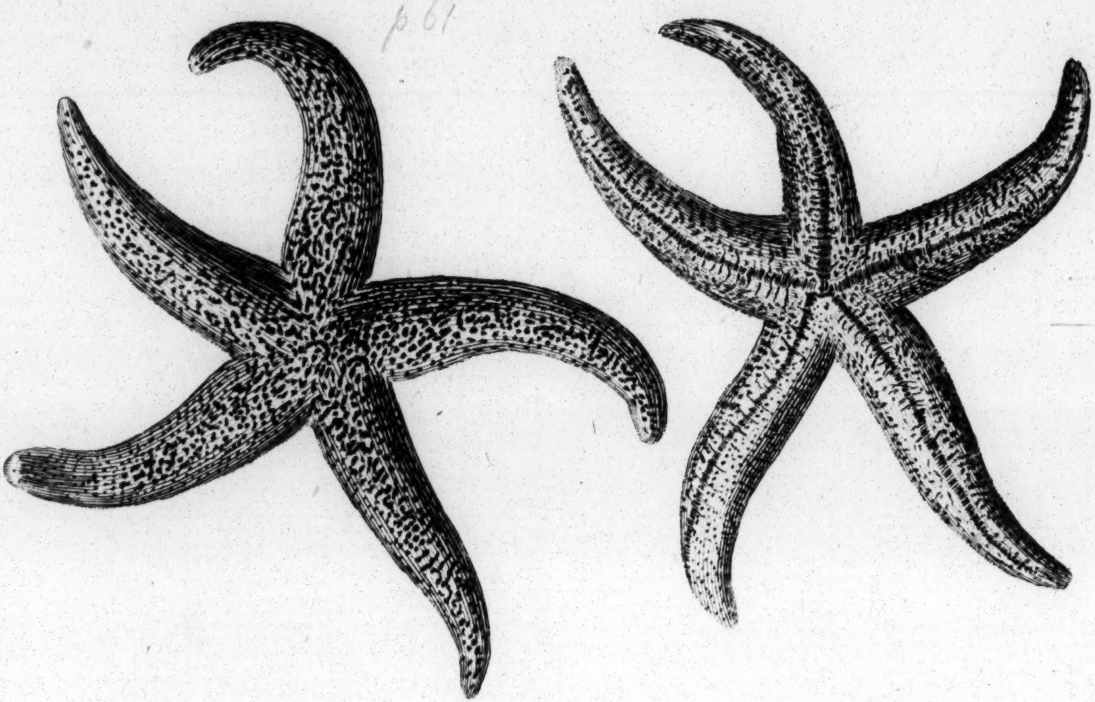


46. p. 54

Pl.XXX. Cl.VI.

56

p 61



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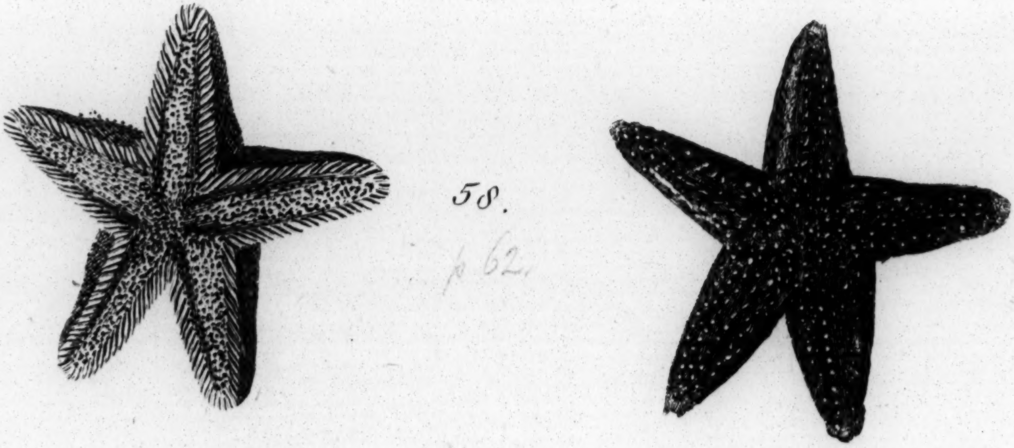
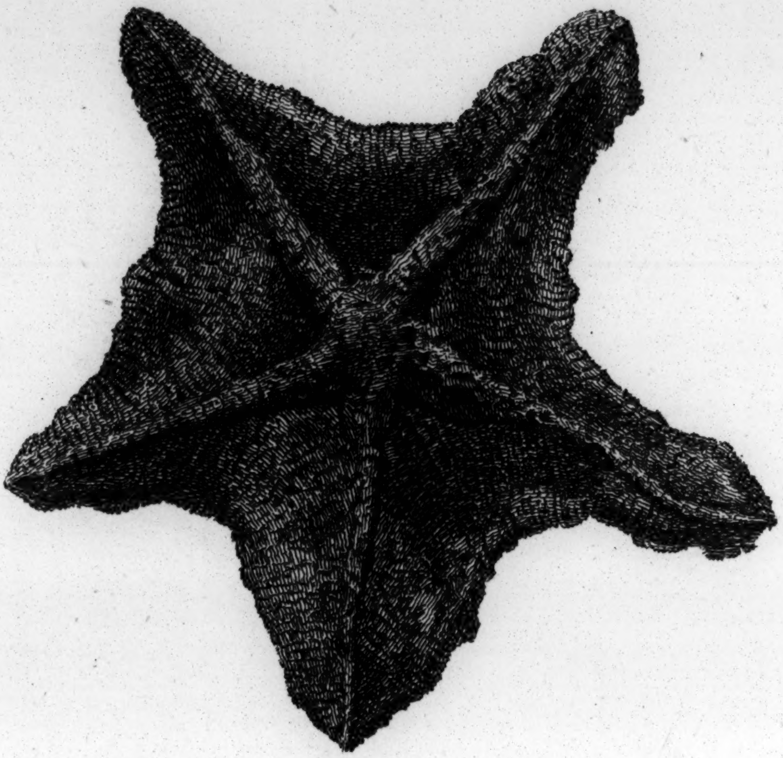
p 62.





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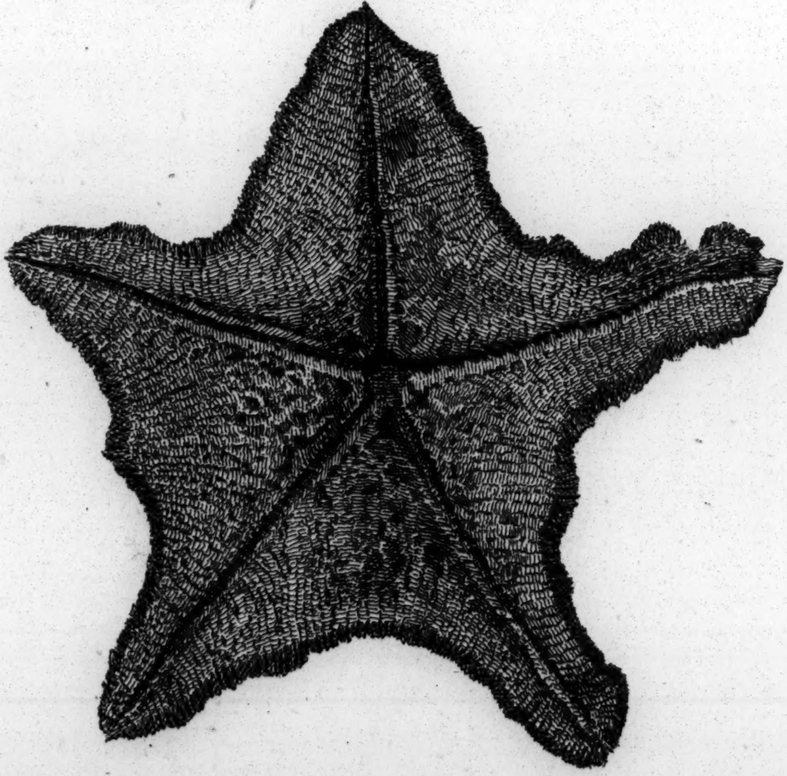

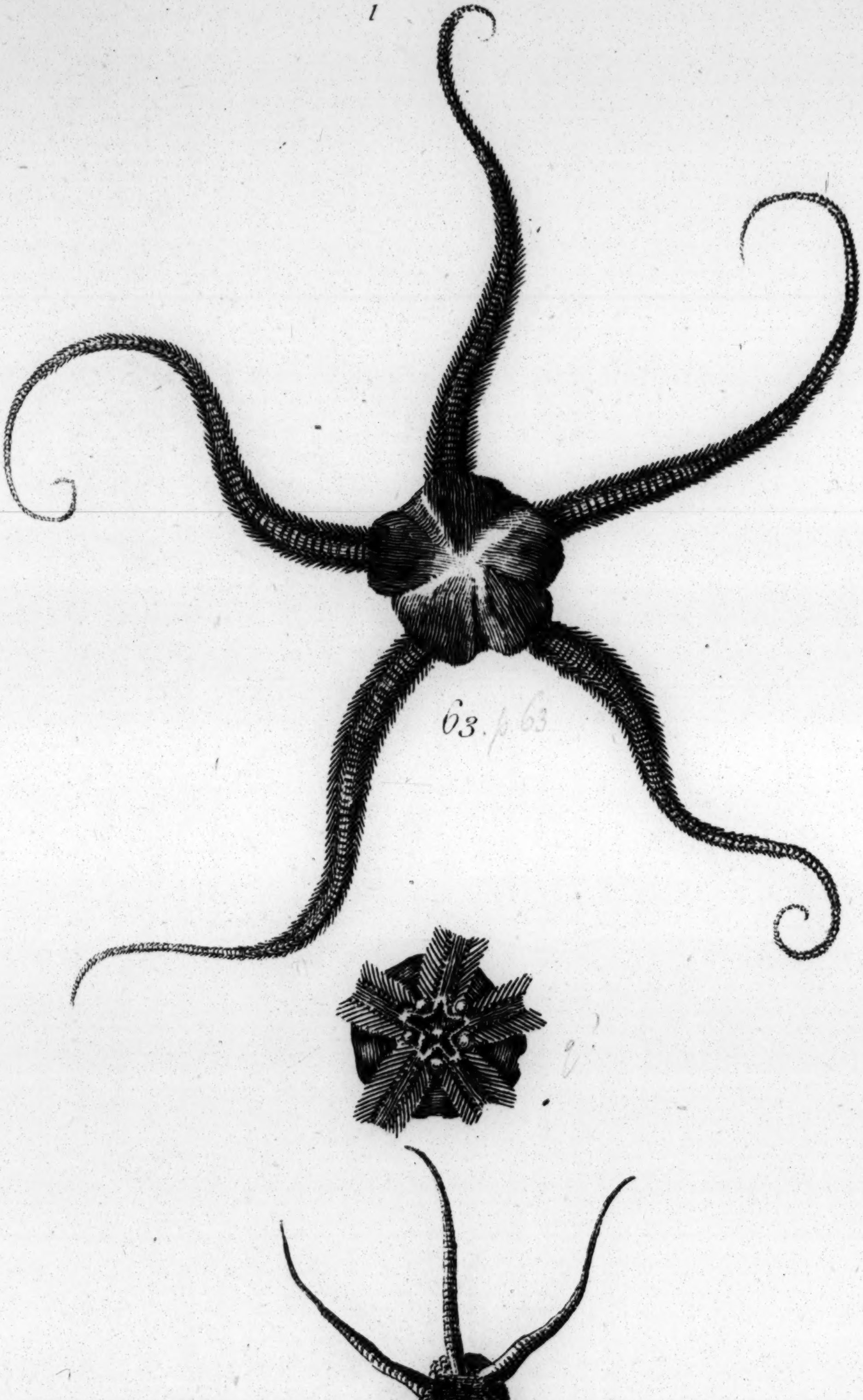

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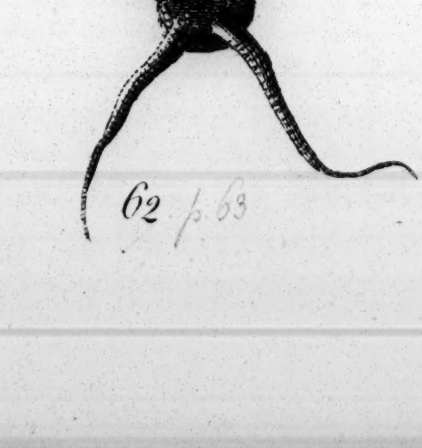
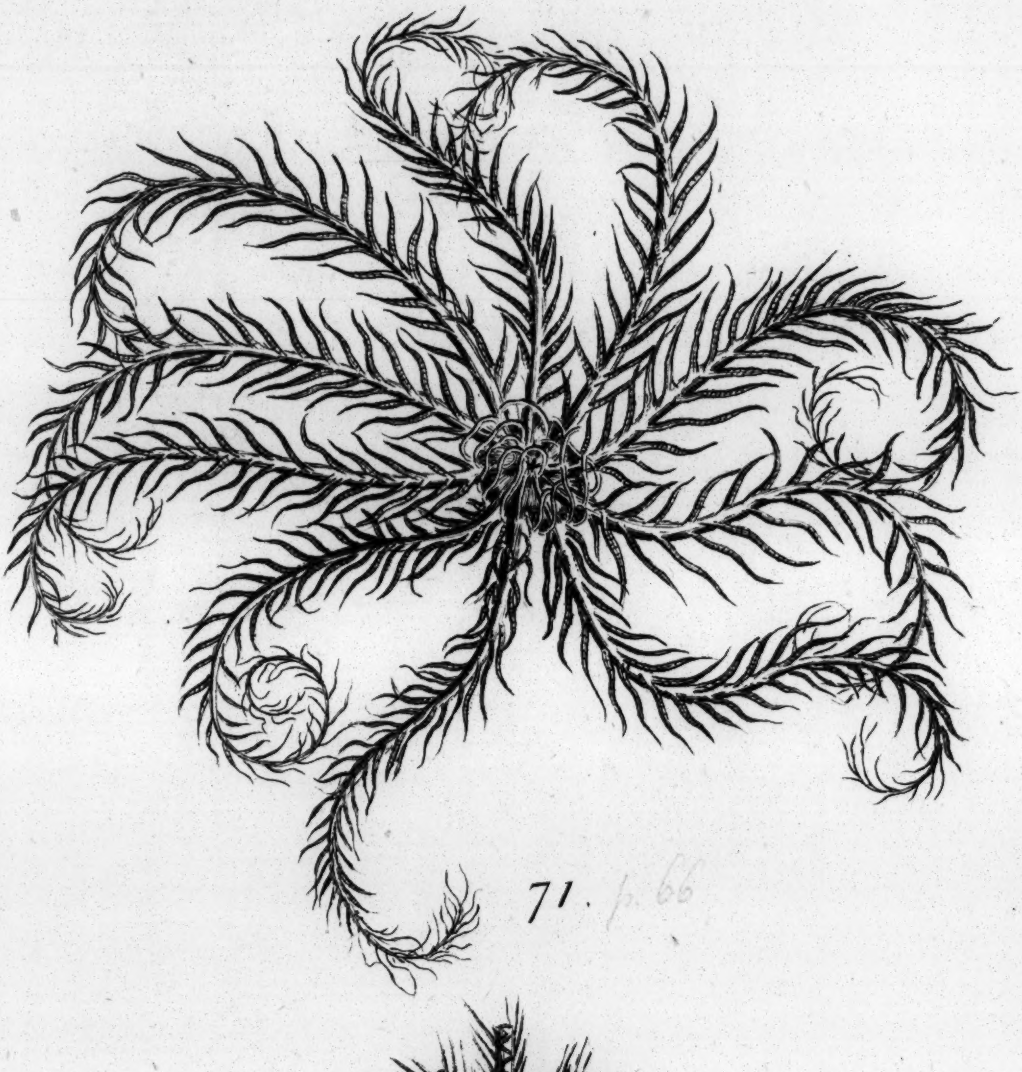
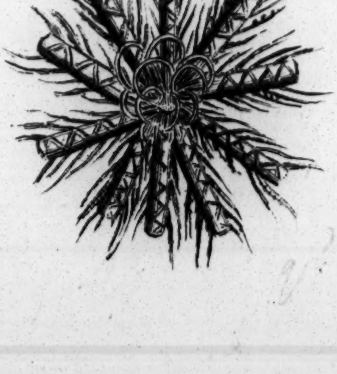


62 p.63

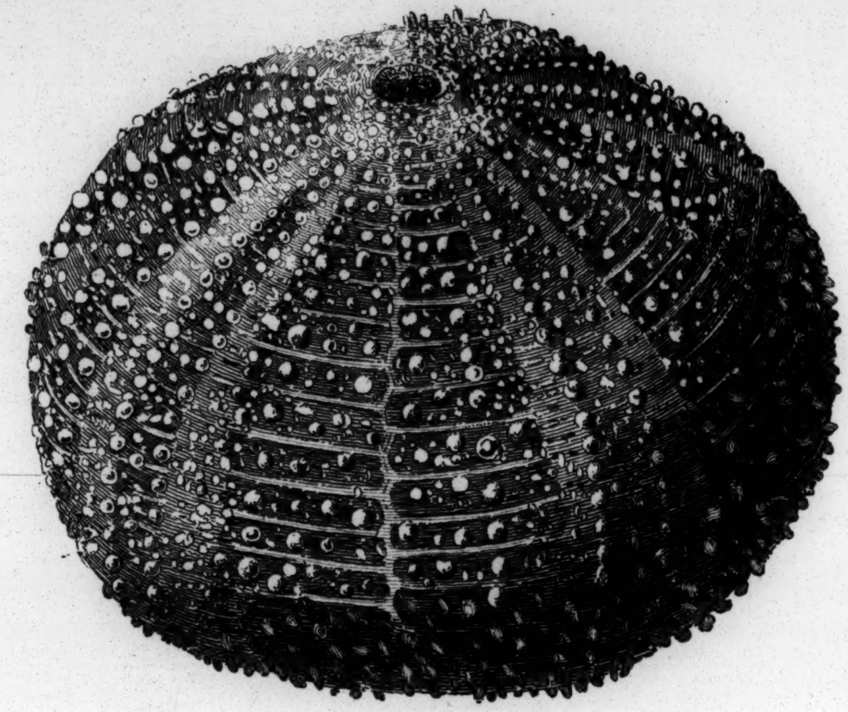


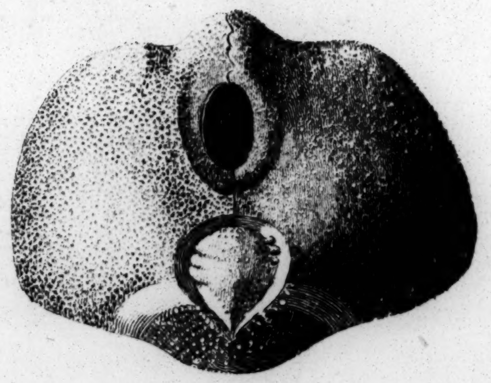
71. p. 66



Pl.XXXIV. Cl.VI.

74. p 67





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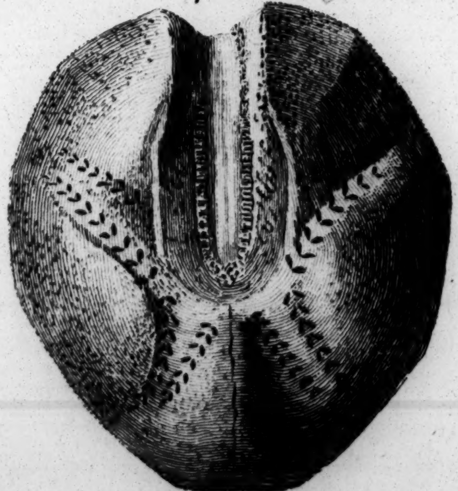

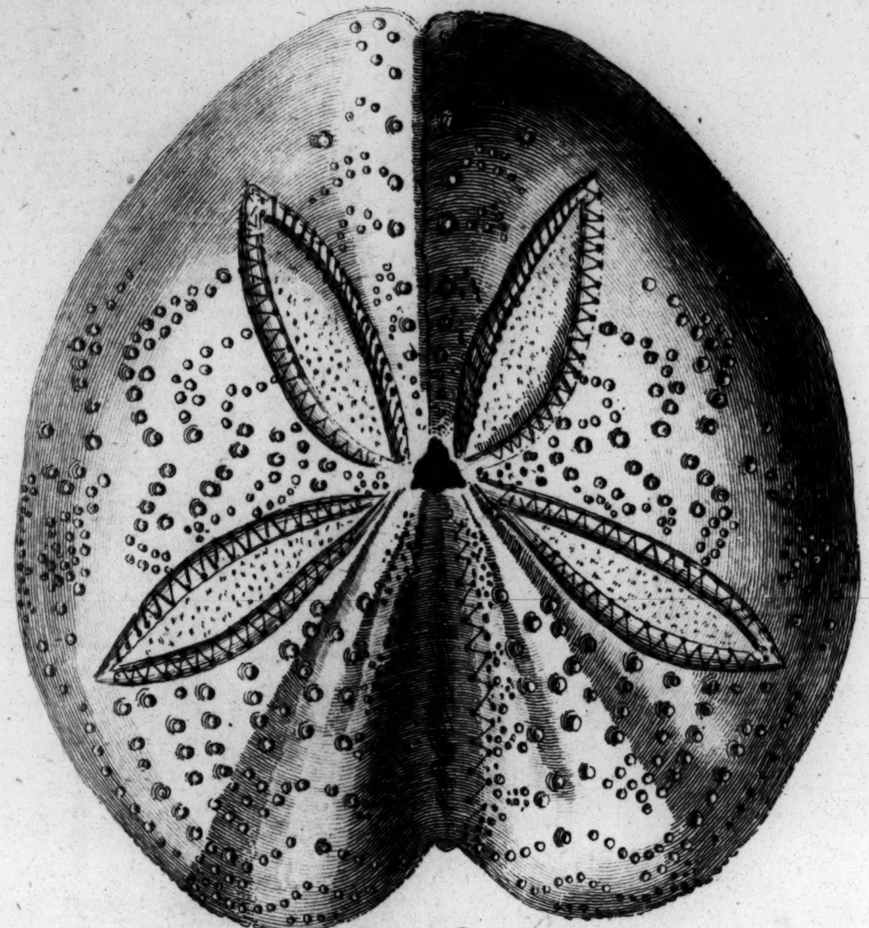

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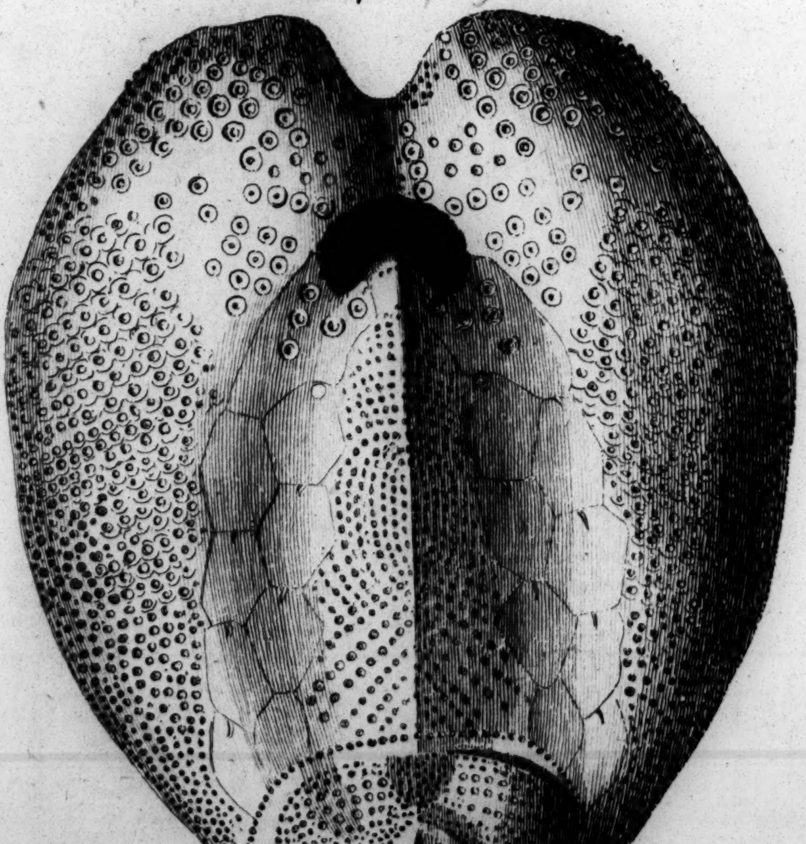
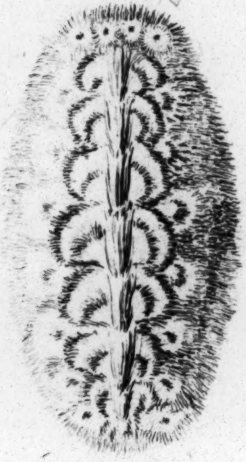


Pl.XXXVI. *Test.*

A.I. p.71



1. p.71

2. p.71

CHITON.

3

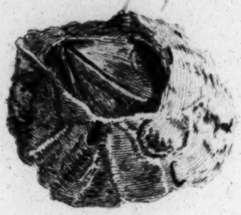
p.72

Pl. XXXVII.

Test.

LEPAS.

4. p.72



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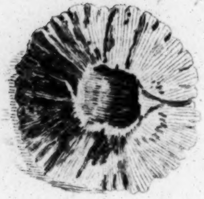
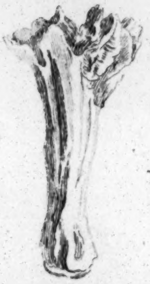
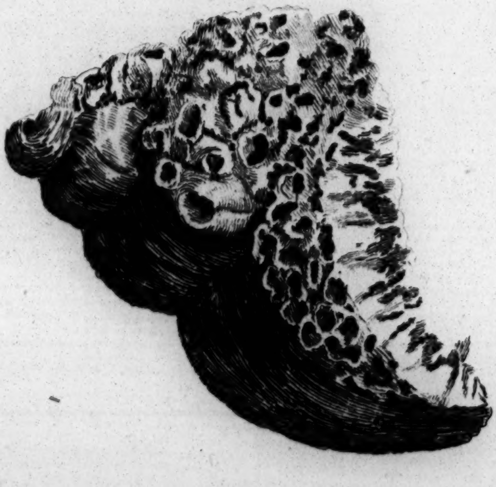




A.5.



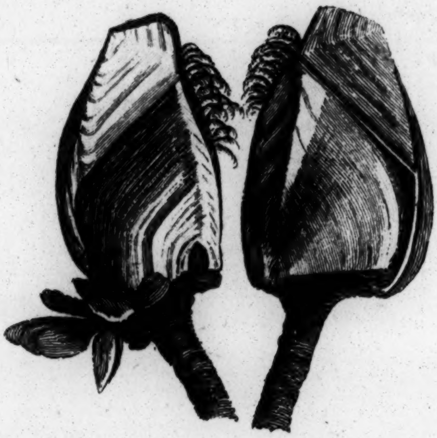
5

p.72

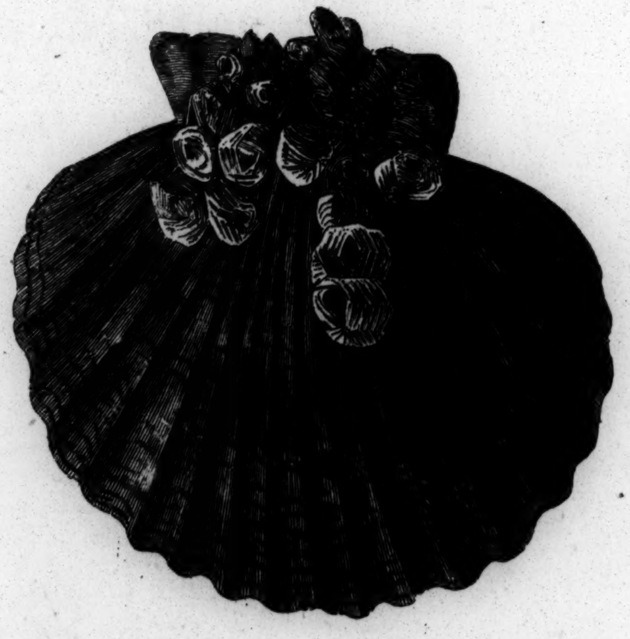
Test

Pl. XXXVIII.

LEPAS.



9. p 74

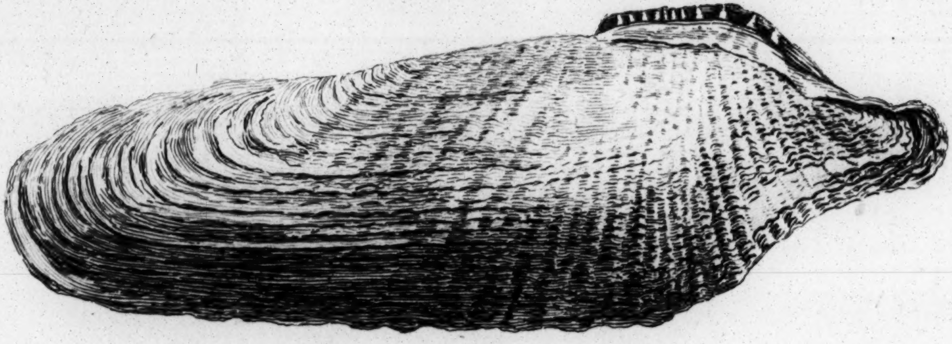


7. p. 73

Pl. XXXIX.

Test.

PHOLAS



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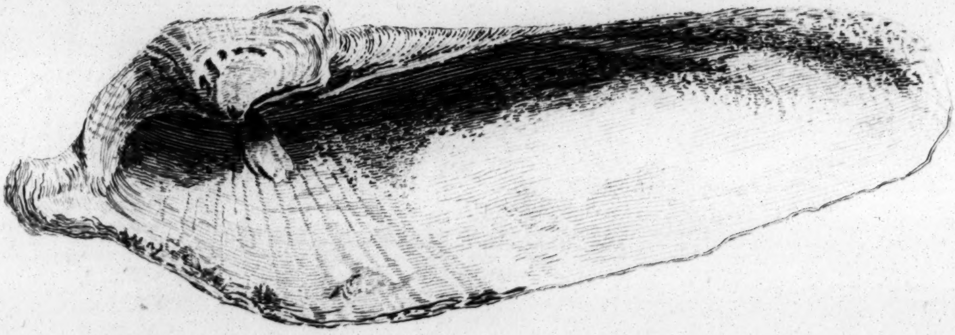
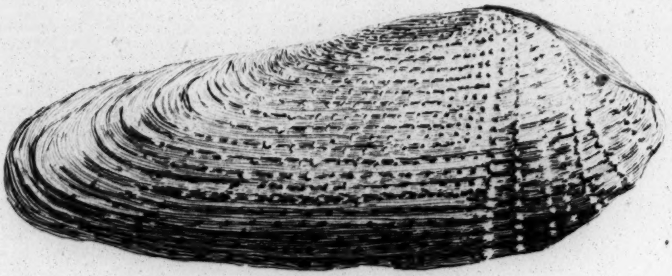


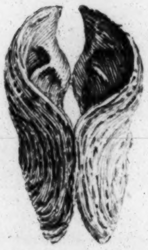


11. p.76

Pl.XL.

Test.

13. p 77



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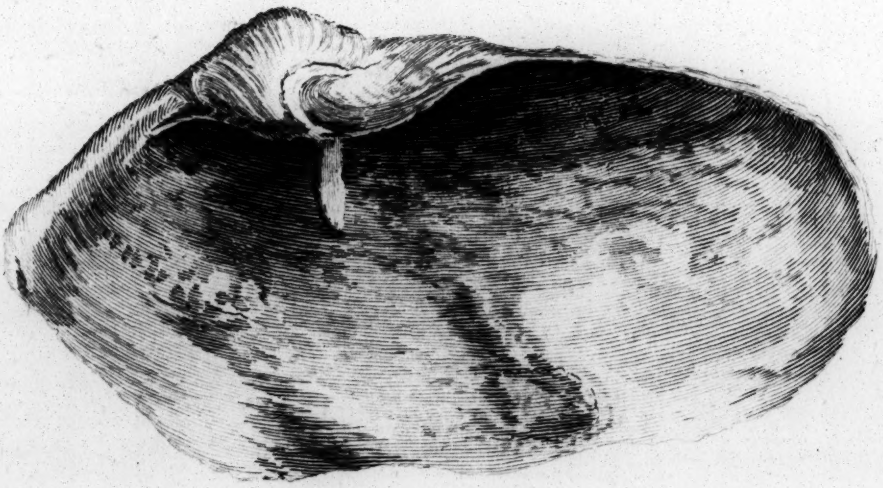
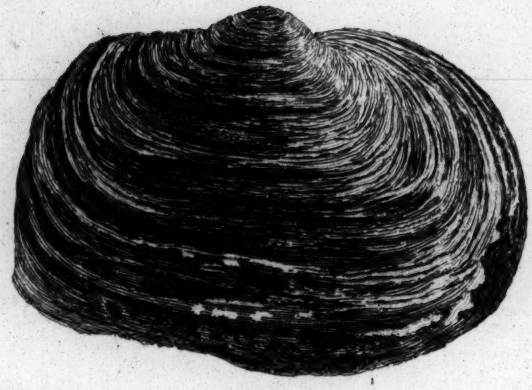


12. p 77

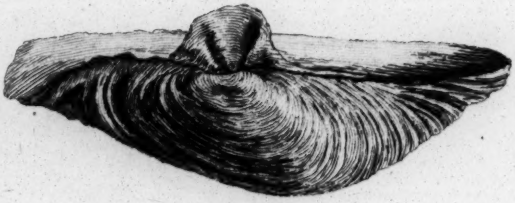
Pl.XLI.

Test.

MYA



14. p.78



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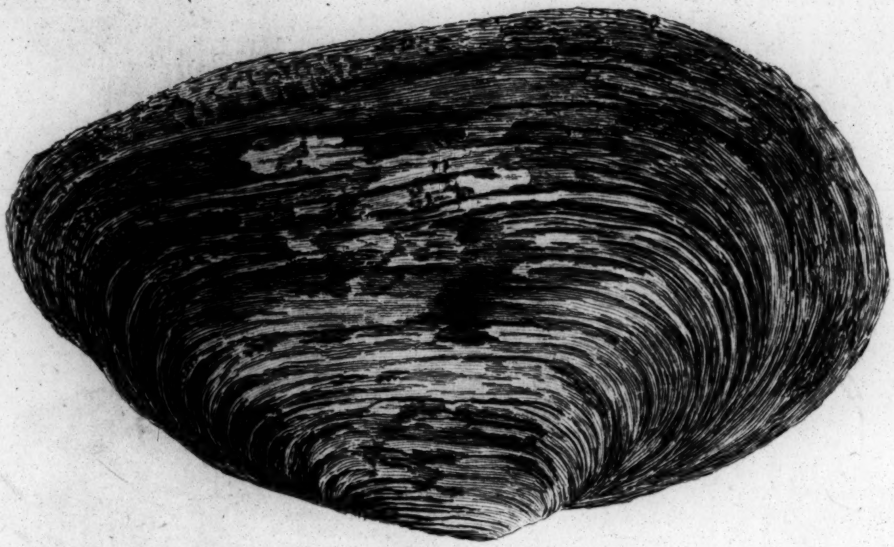
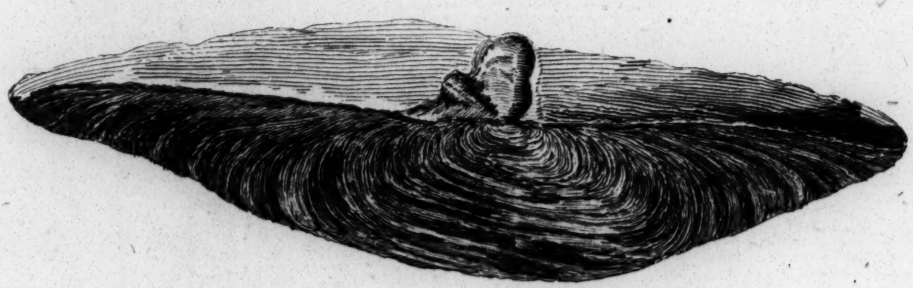
Test.



MYA

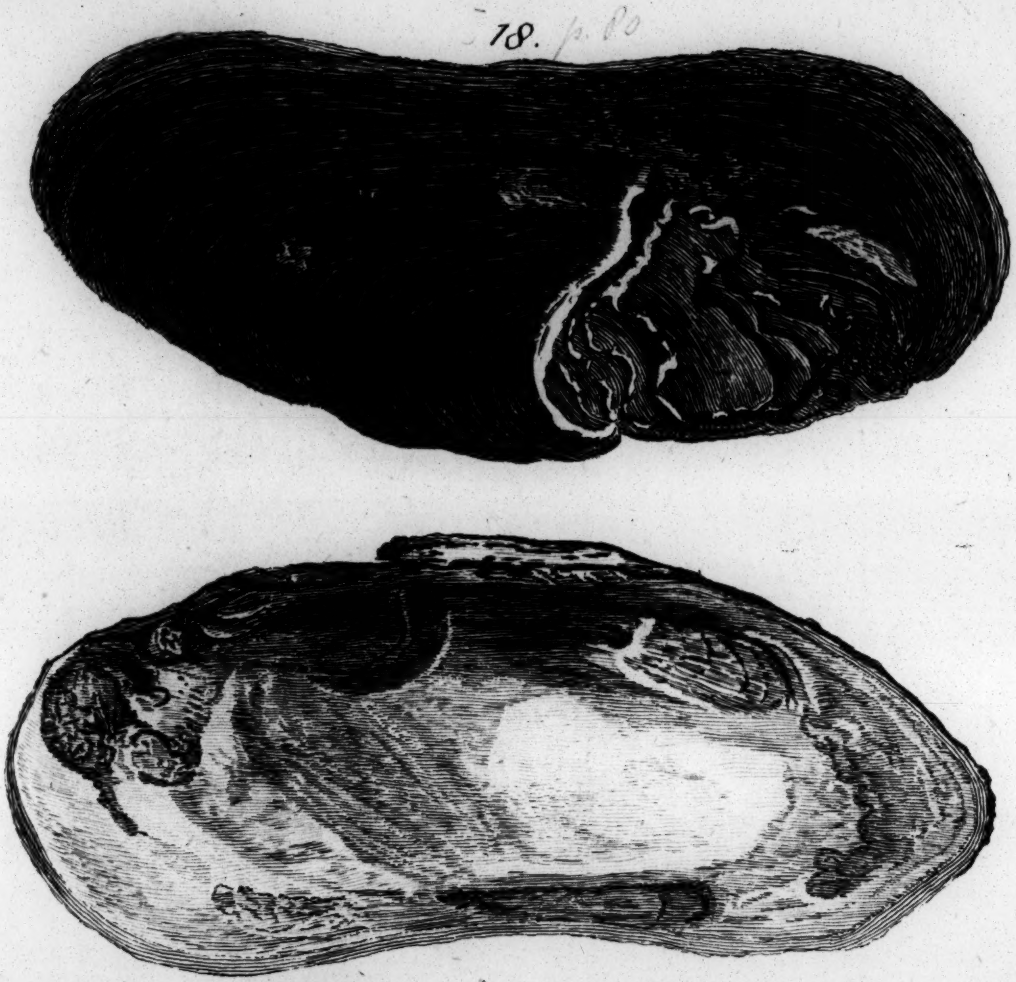
16. p.79



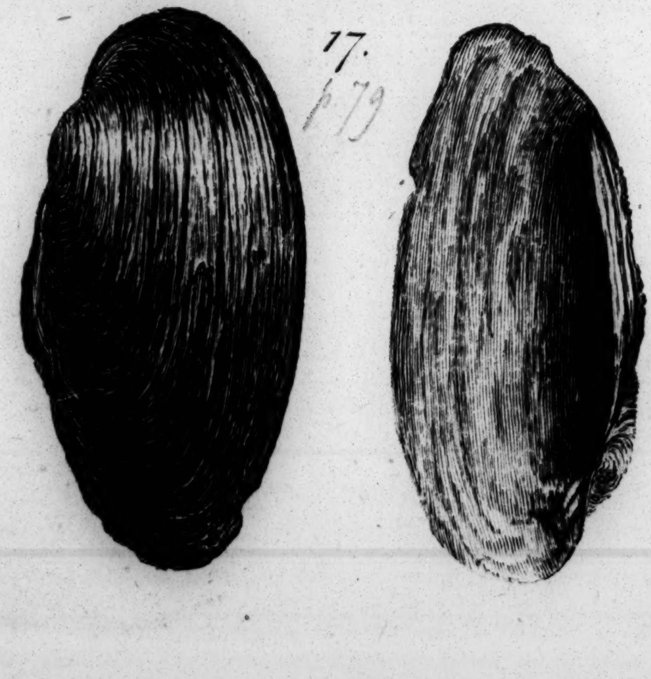
Pl. XLIII. Test.

MYA.

18. p. 80



17.
p. 79



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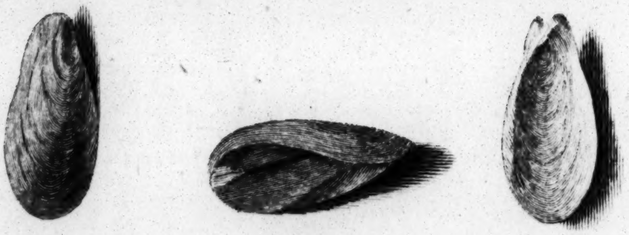
MYA.



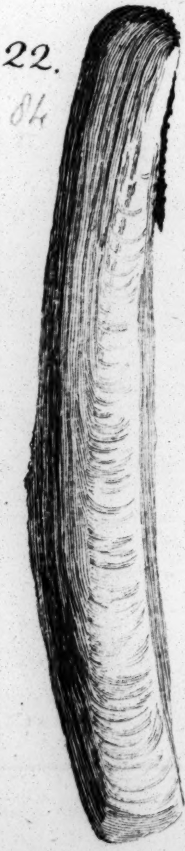
19. p. 82

Pl.XLV.

Test.

SOLEN.

22.
p. 84



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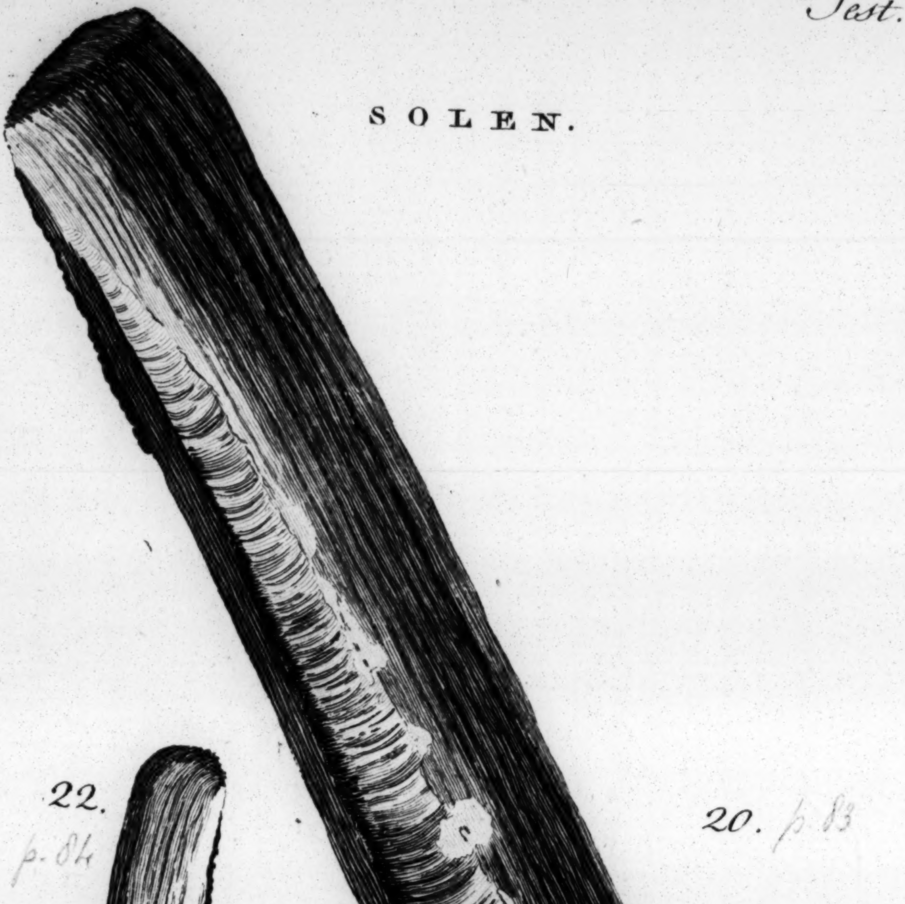
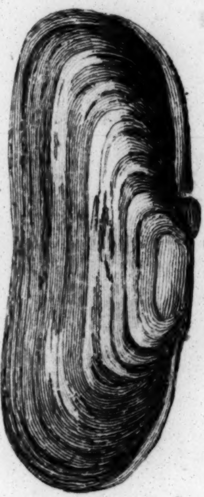


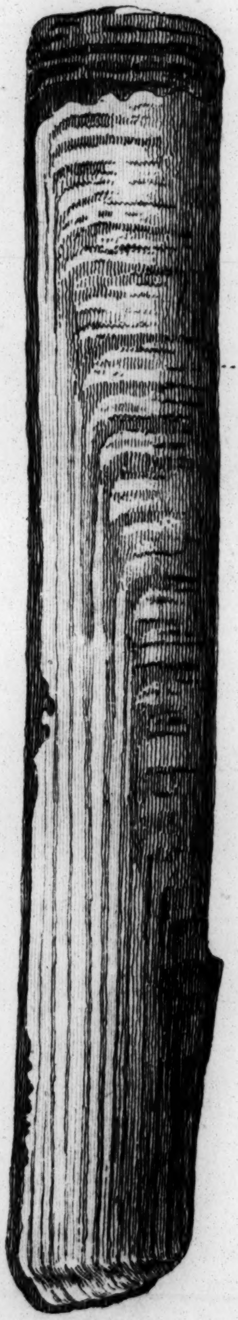
Pl. XLVI.

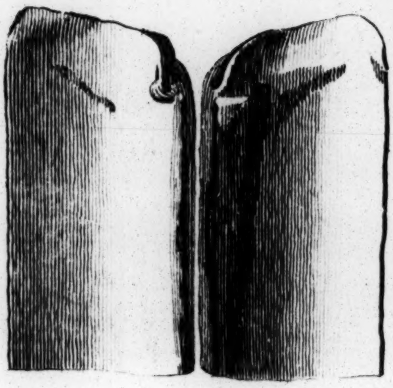
Test

SOLEN.



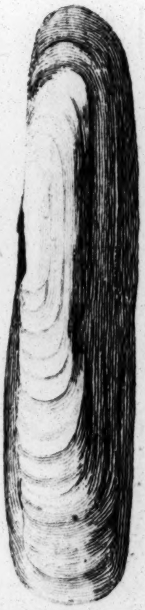
25 p. 85





21 p. 83

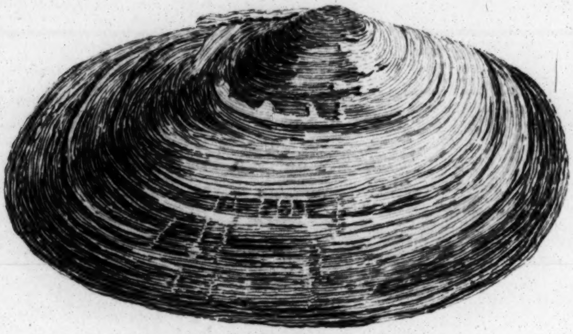
23 p. 84



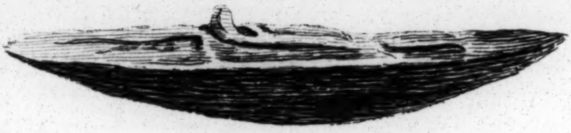
24. p. 84

Pl.XLVII. Test.

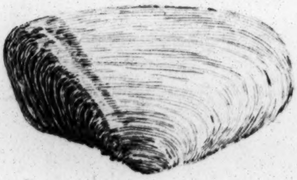
TELLINA.



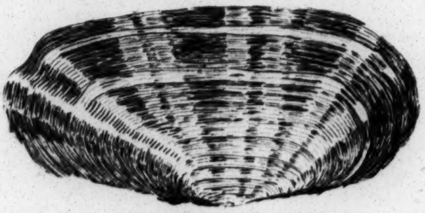
27 p. 87.



26. p. 86



31. p. 88

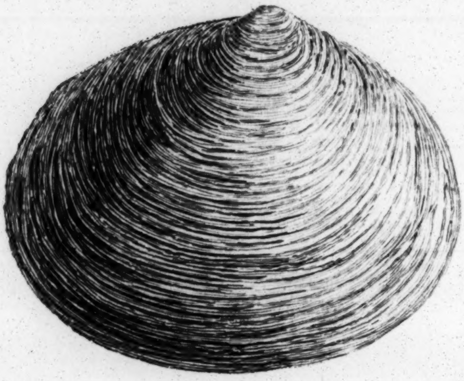


Pl. XLVIII. *Test.*

TELLINA.

28.

p. 87



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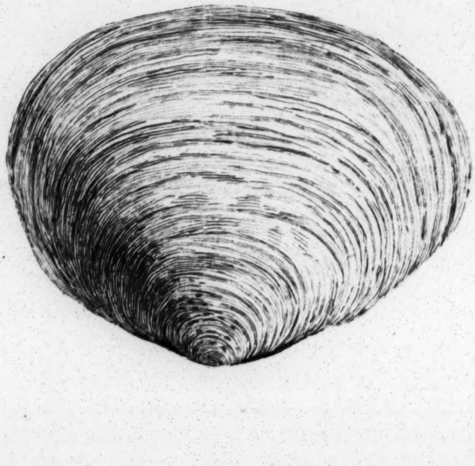

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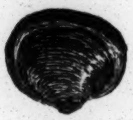
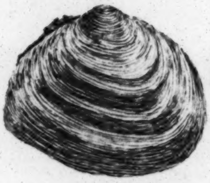


36. p. 89



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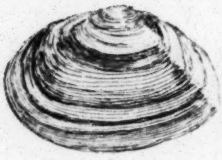
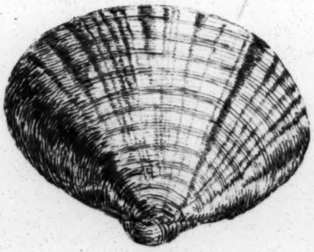


32.

p. 88

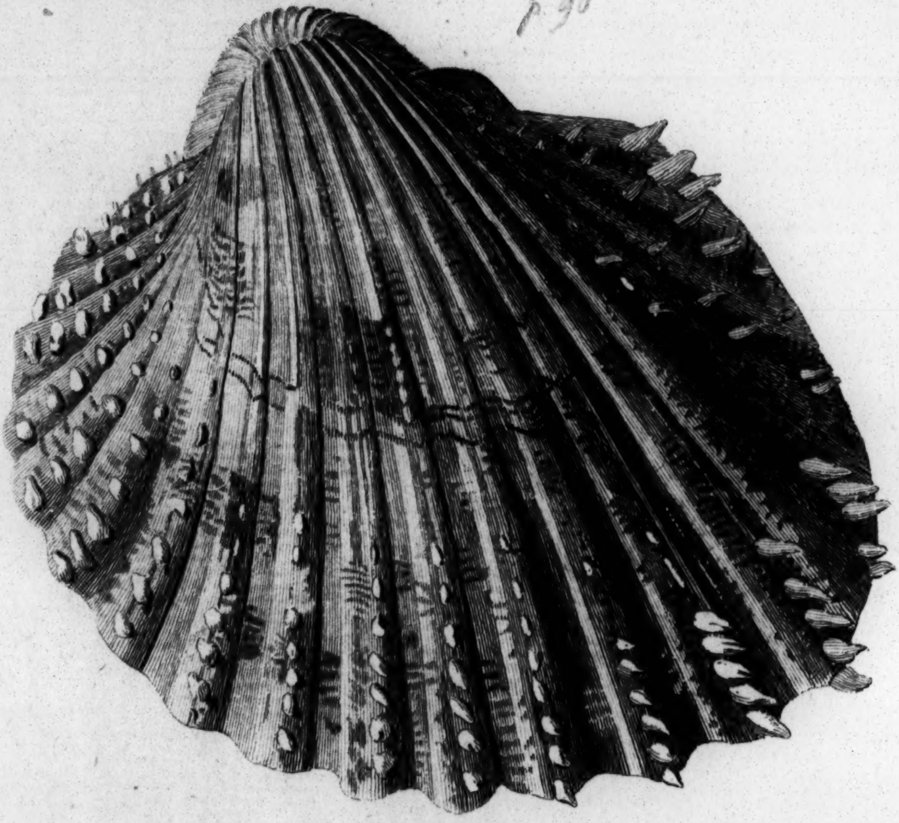
30. p. 87



32.A.

CARDIUM.

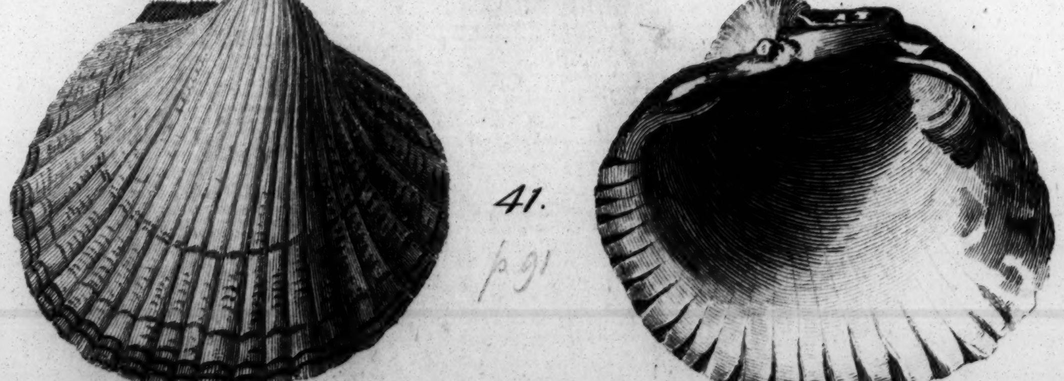
p. 90



37.

39.

p 90



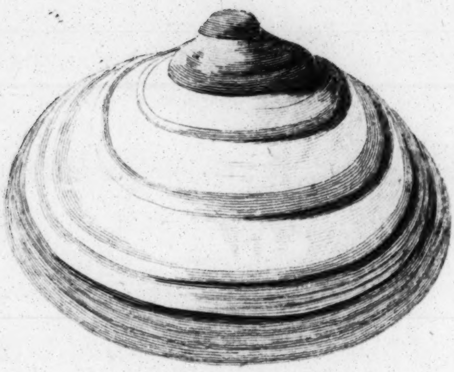
41.

p 91

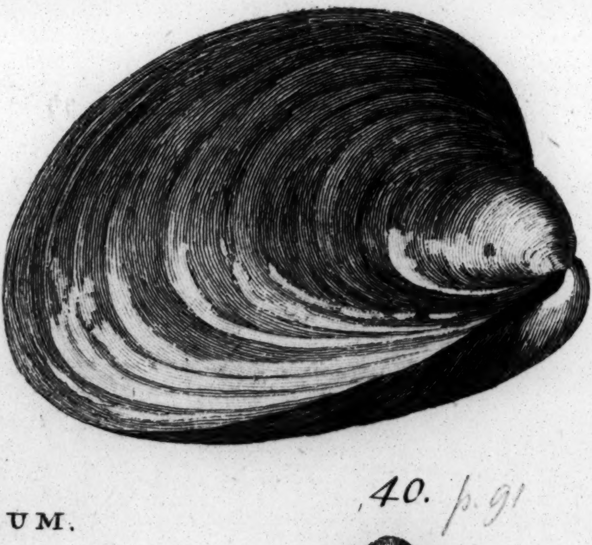
P. Mazell sculp.

MACTRA.

43.A.

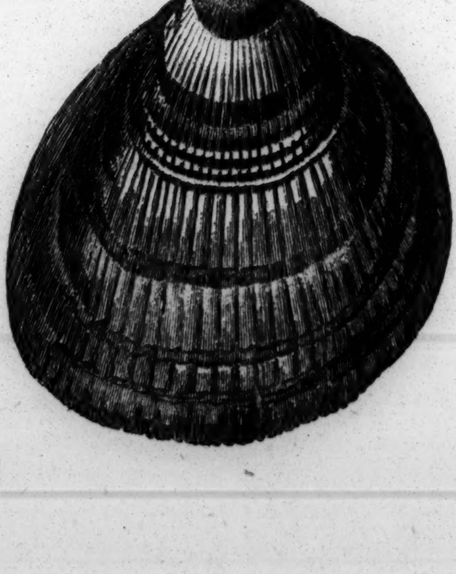


p. 92



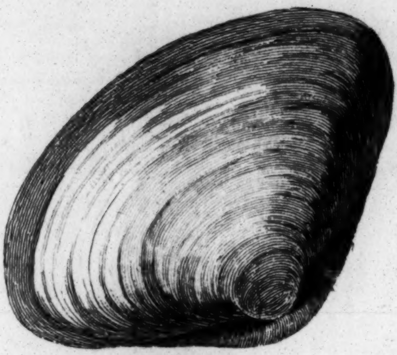
CARDIUM.

40. p. 91



P. Mazell sculp.

MACTRA.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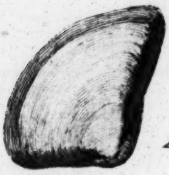
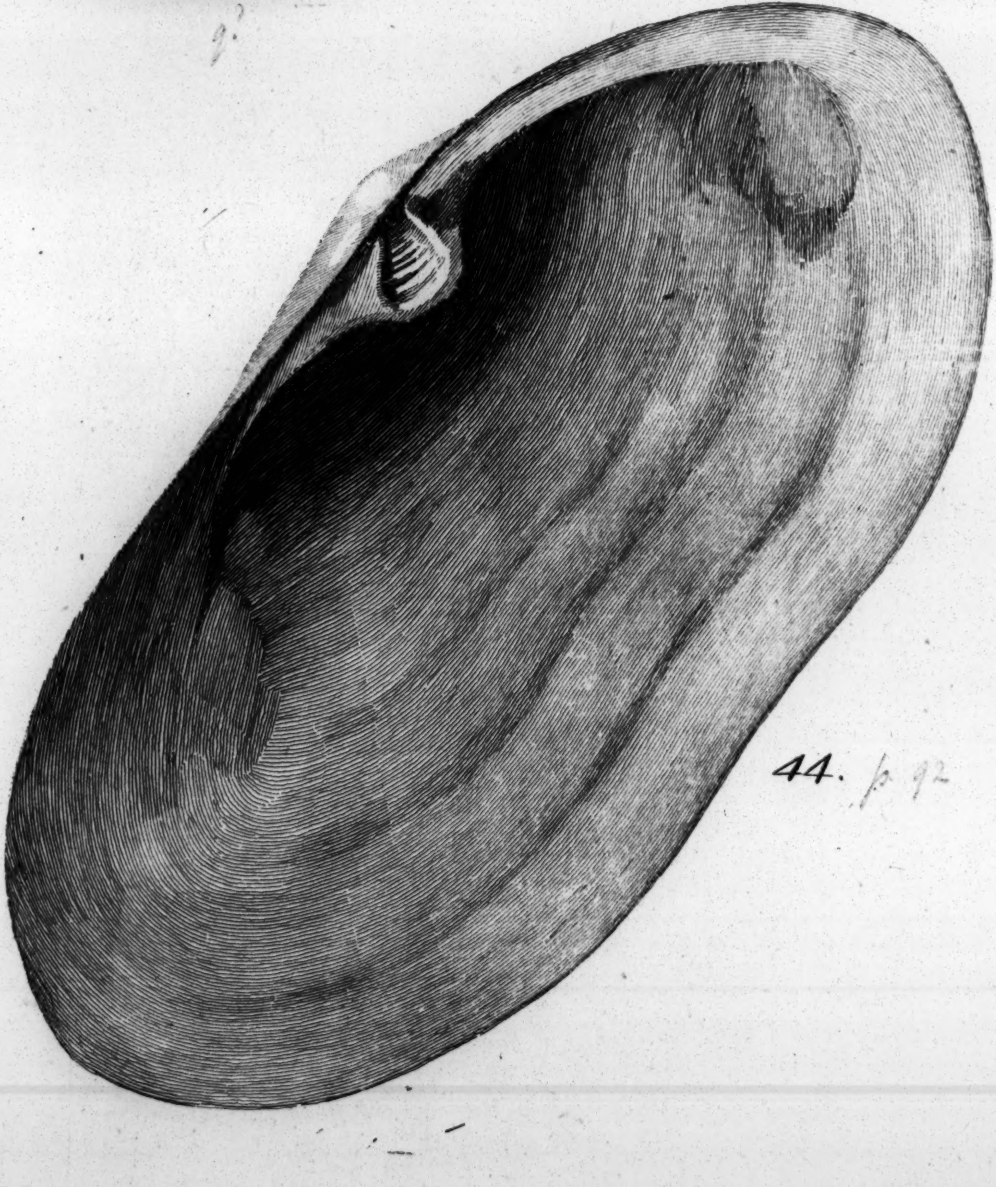
9?


42. p 92

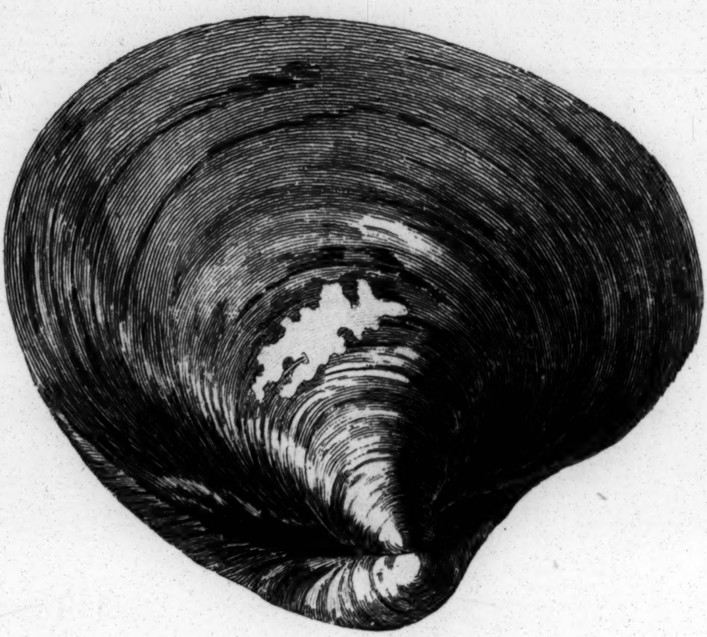

44. p 92

P. Mazell sculp.

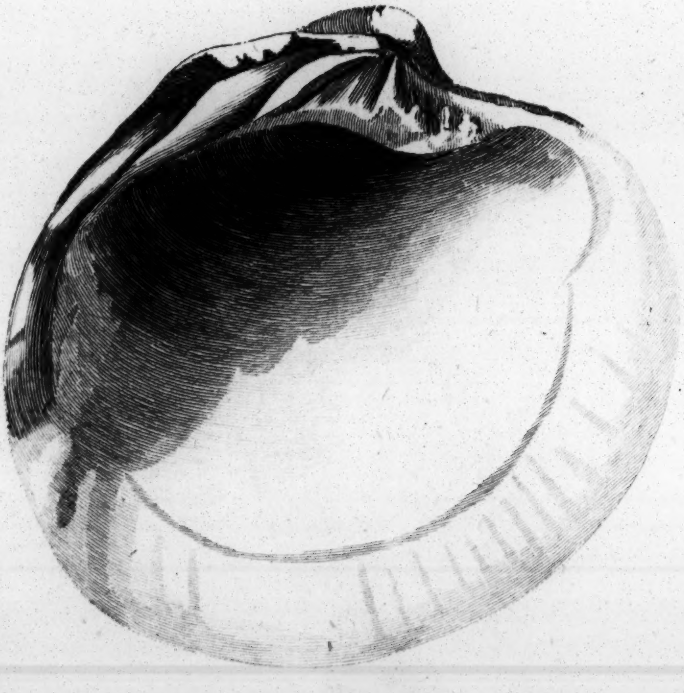
Pl. LIII.

Test.

VENUS.



47. p. 94



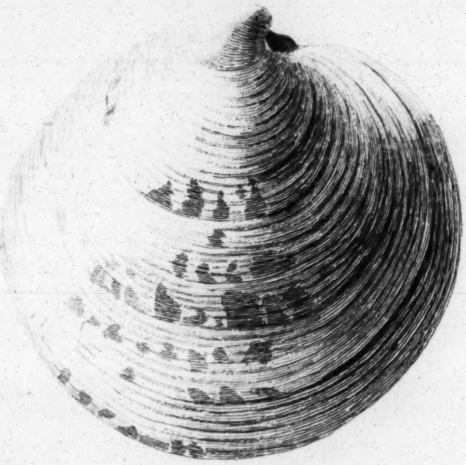
P. Mazell sculp.

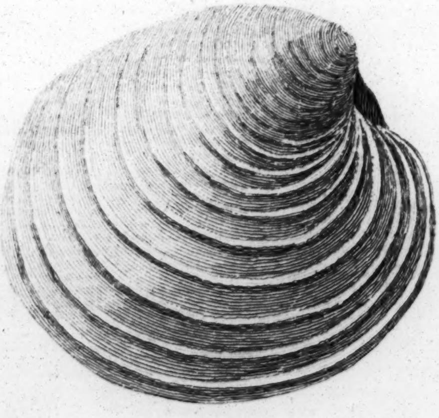
Pl LIV.

Test.

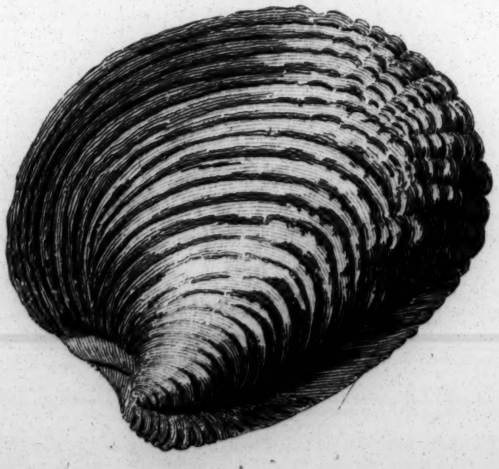
VENUS.

49 A. p. 95





48. A. p 94

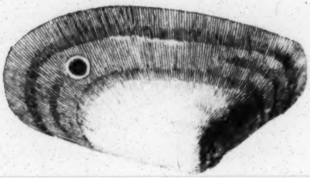


48: p. 94

P. Mazell sculp.

DONAX.

45. p. 93



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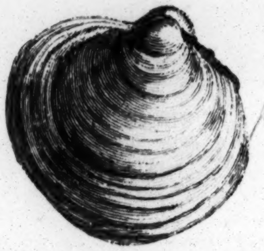

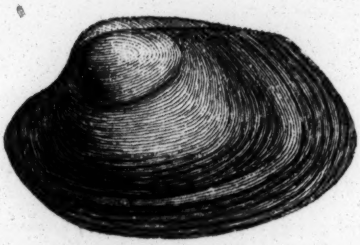

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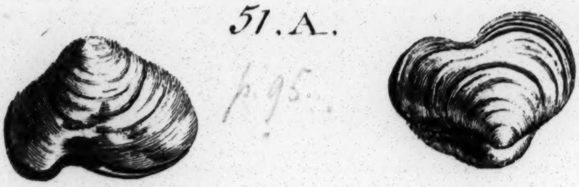
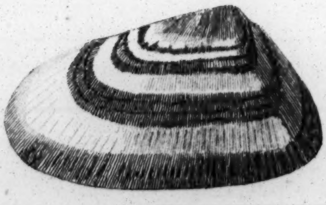




46. p 93

P. Mazell sculp.

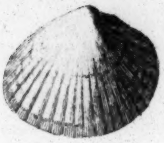
PI

Pl.LVI.

Test.

VENUS.

56. p. 97



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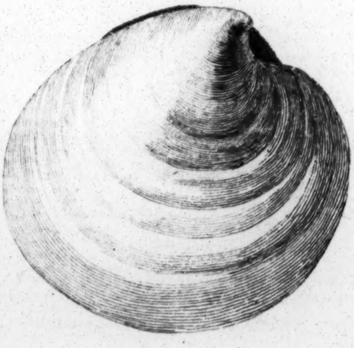

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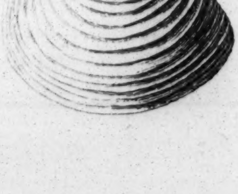


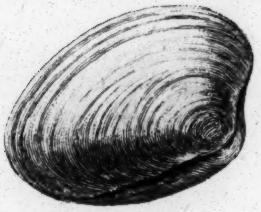
P. Mazell sculp.

Pl. LVII.

Test.

VENUS.

34. p. 89



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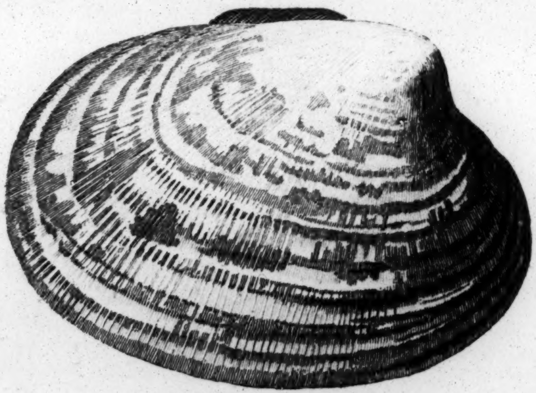

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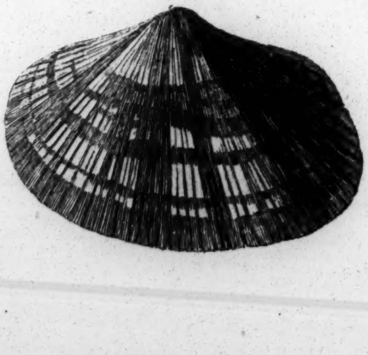

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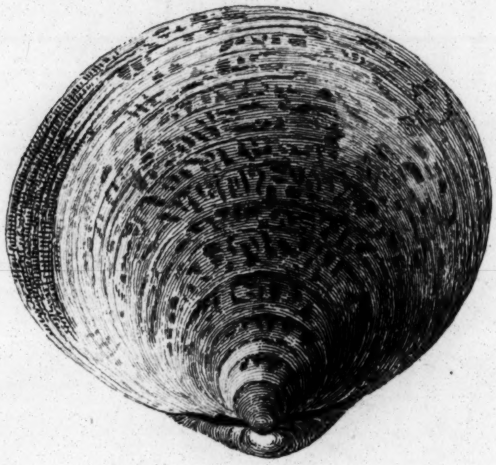
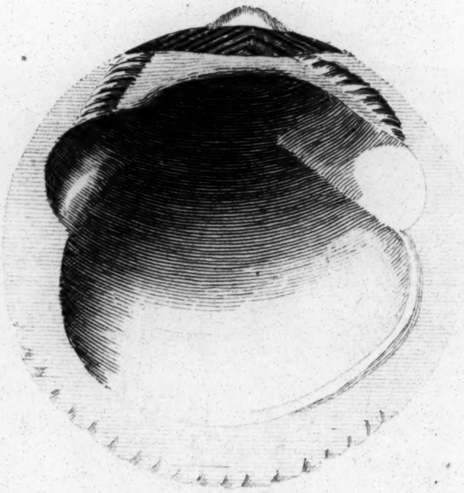
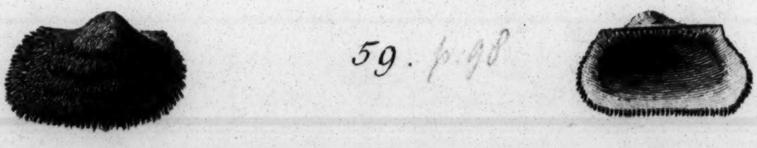


58. p. 98



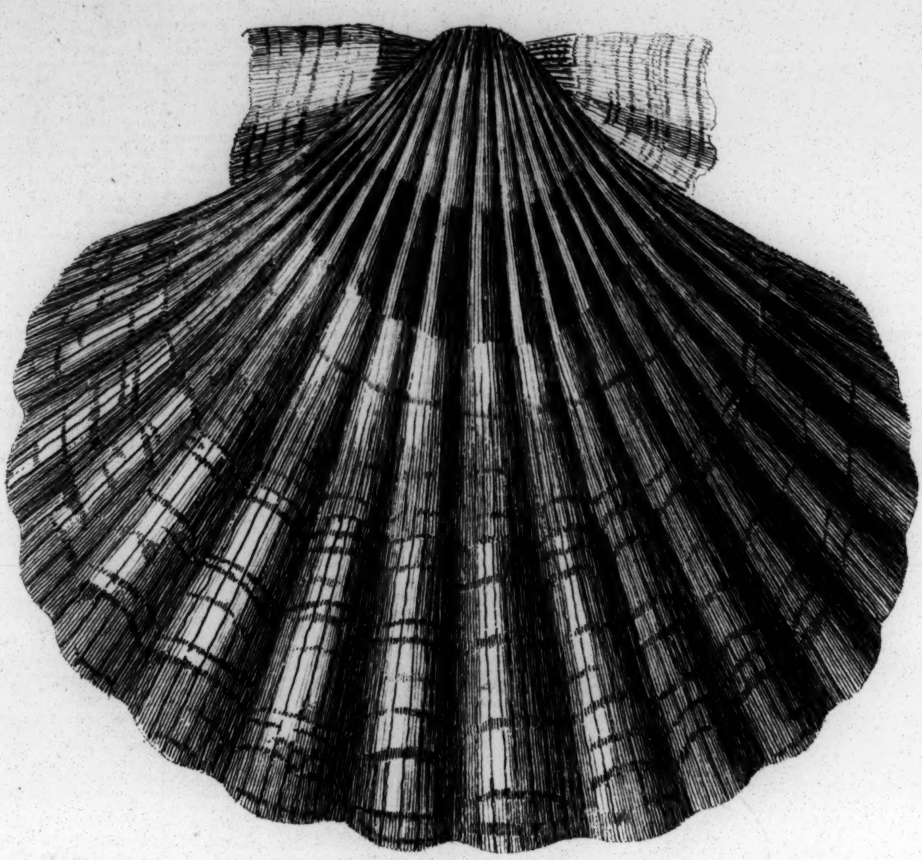


59. p. 98

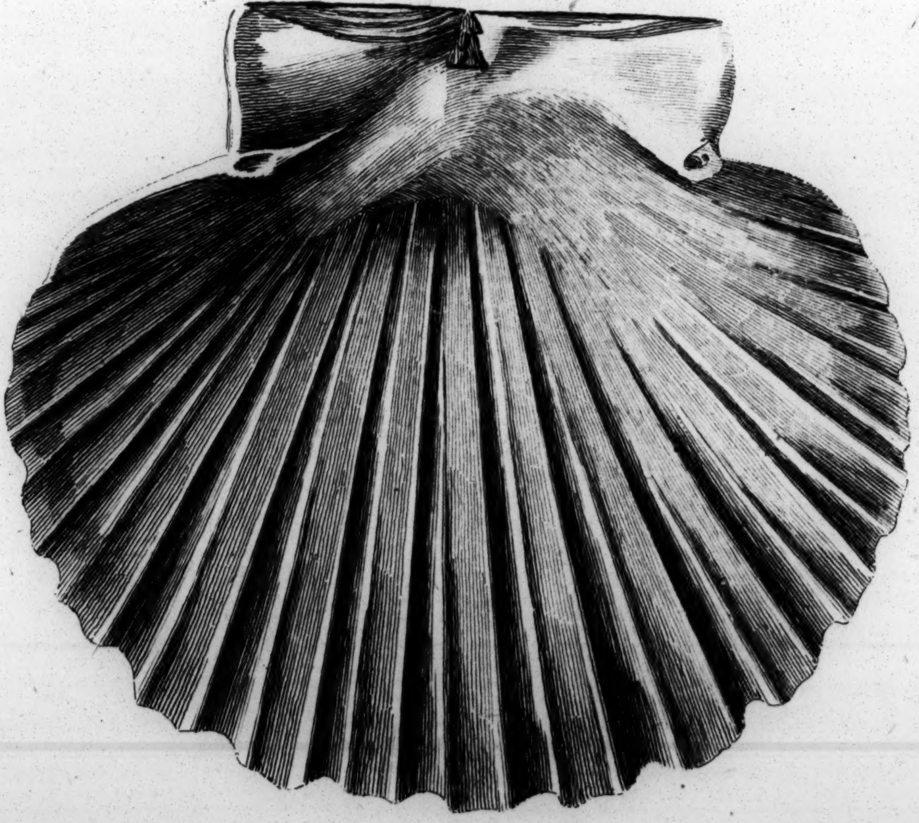
P Mazell Sculp.

PECTEN.

Test



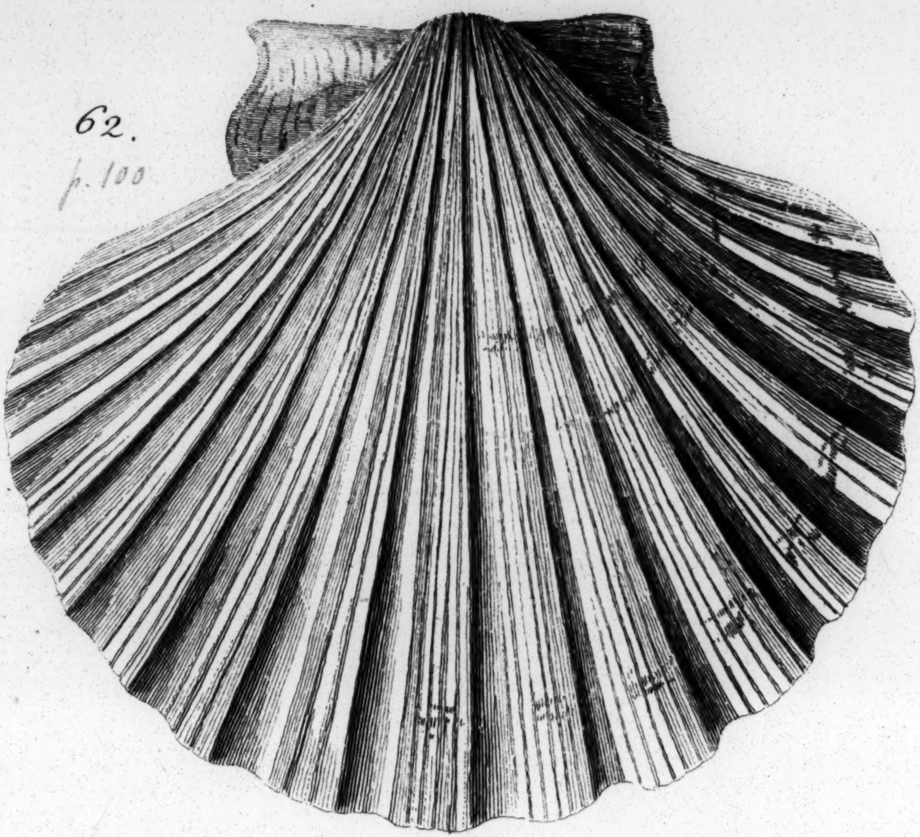
61. p99



P Mu

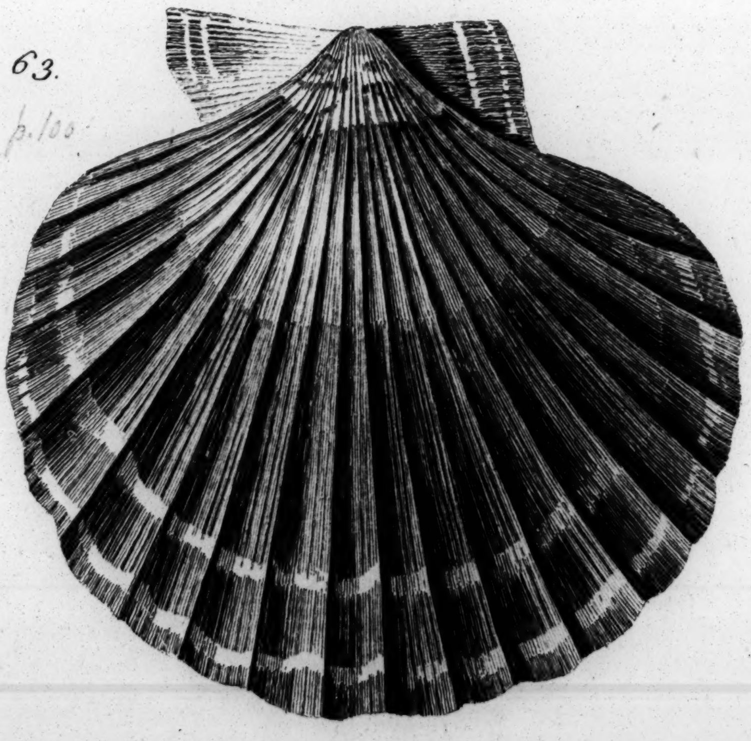
62.

p. 100

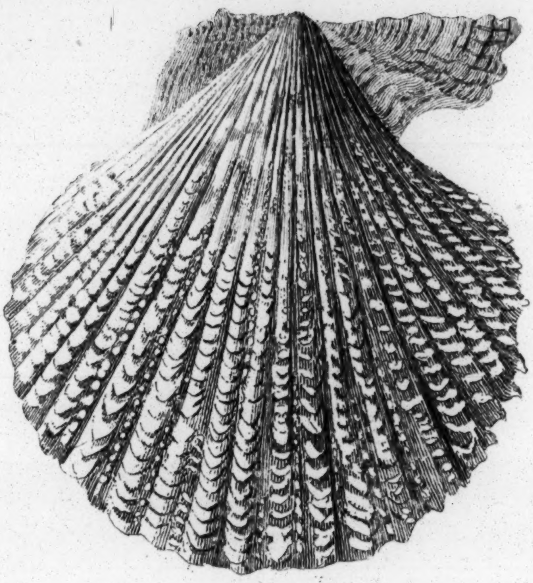


63.

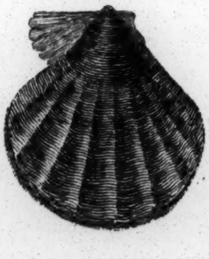
p. 100



64. p.101

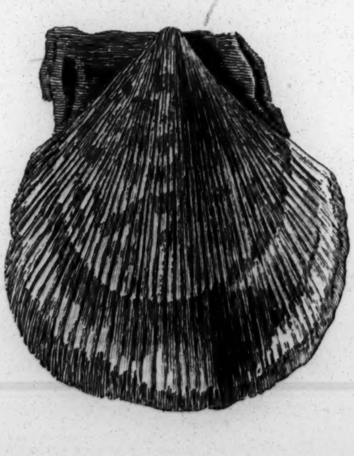


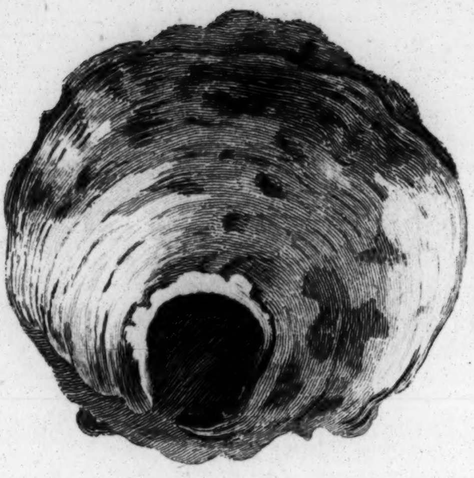
66. p.102



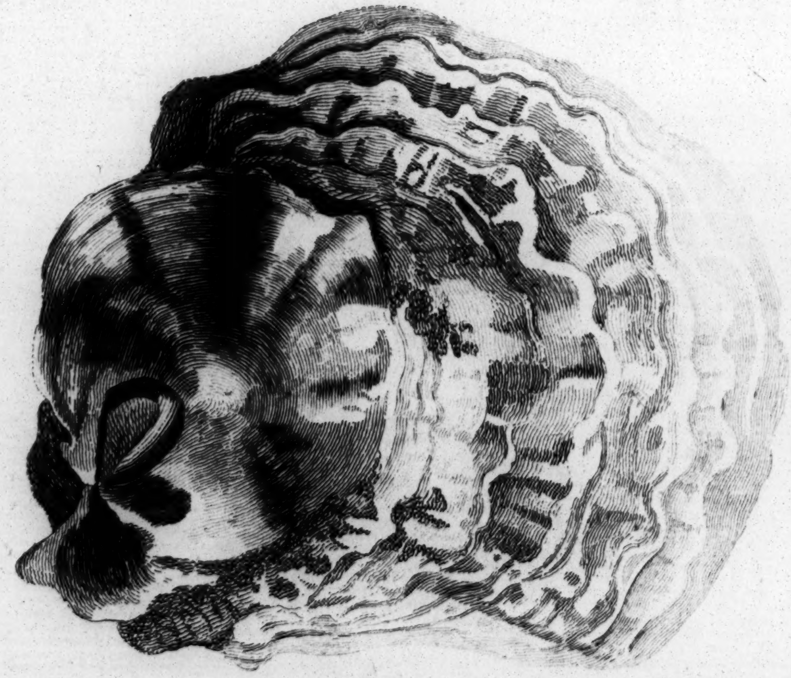
PECTEN.

65. p.101





ANOMIA. p. 108

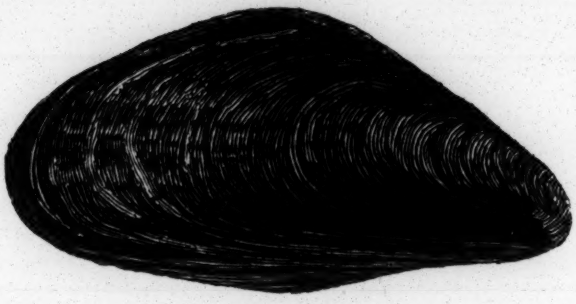


70. p 102-3

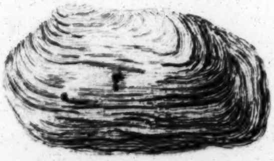
Pl. LXIII.

Test.

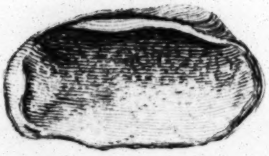
MYTILUS.

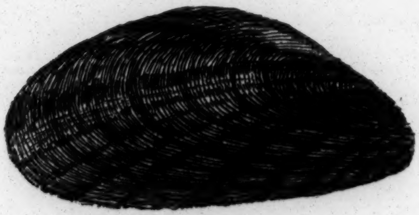


73. p. 110



72. p. 110





75. p. 112

1

Pl. LXIV.

Test.

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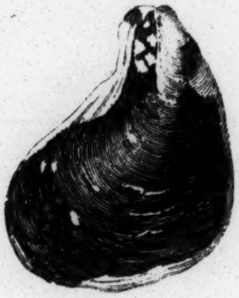
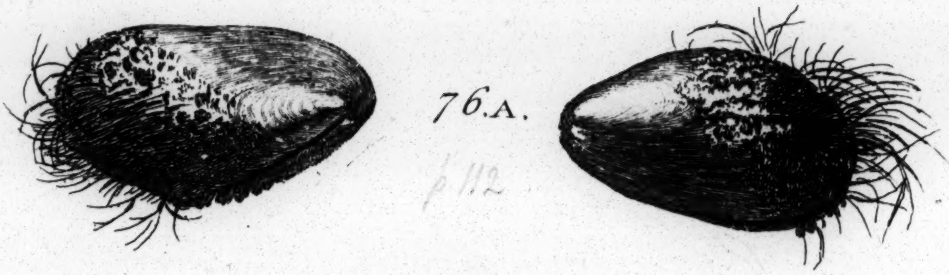
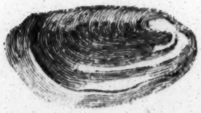


74. p. 111



76.A.

p. 112



q? Mytilus

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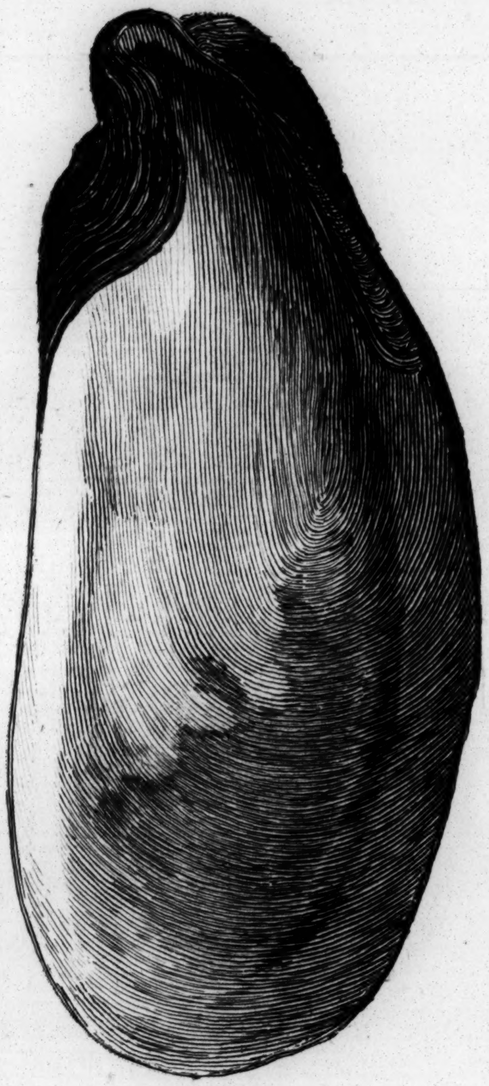
Pl LXV. *Test.*

MYTILUS.



76. p. 112

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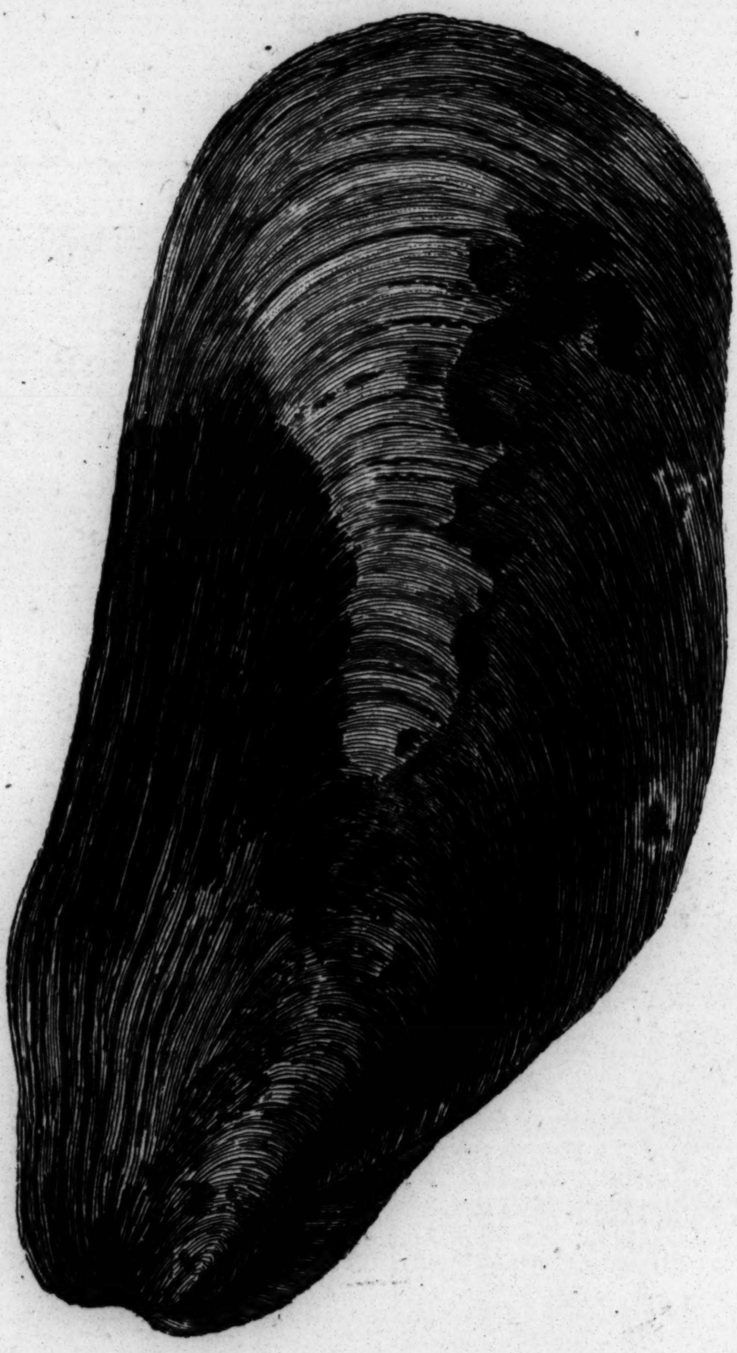


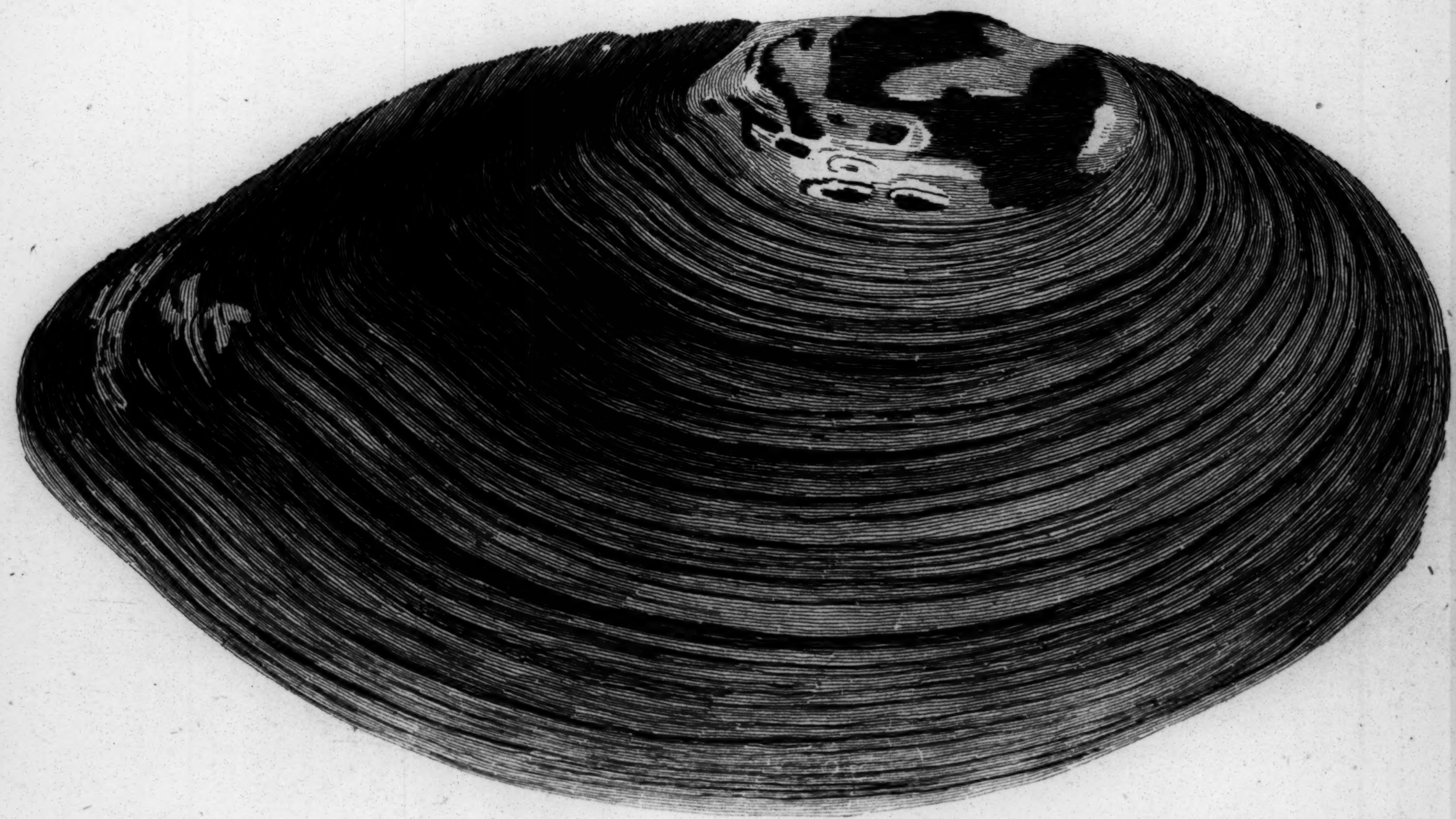
77· p. 113

Pl. LXVII.

Test.

MYTILUS.

p 113



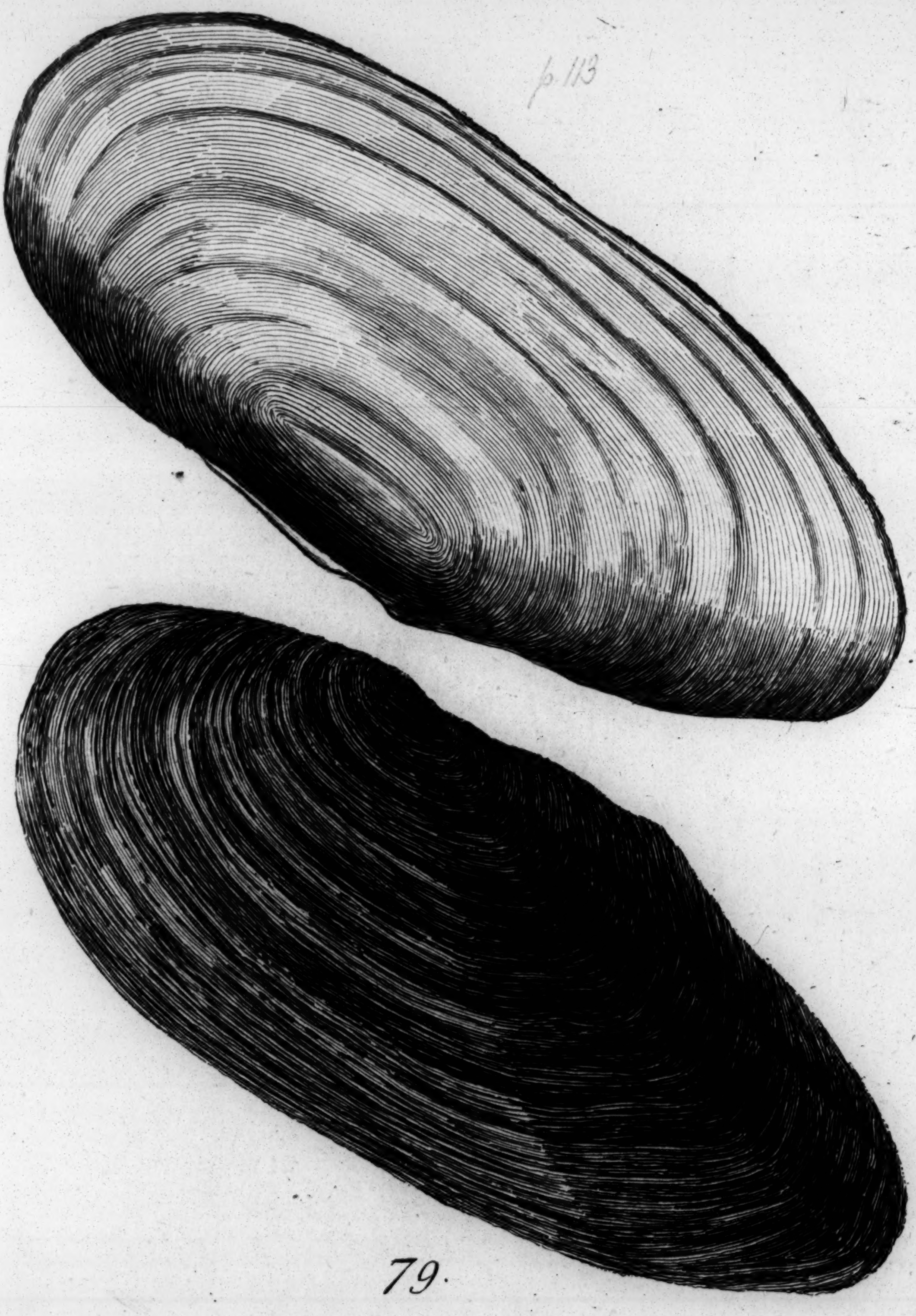
78.

Pl. LXVIII.

MYTILUS

Test.

p 113

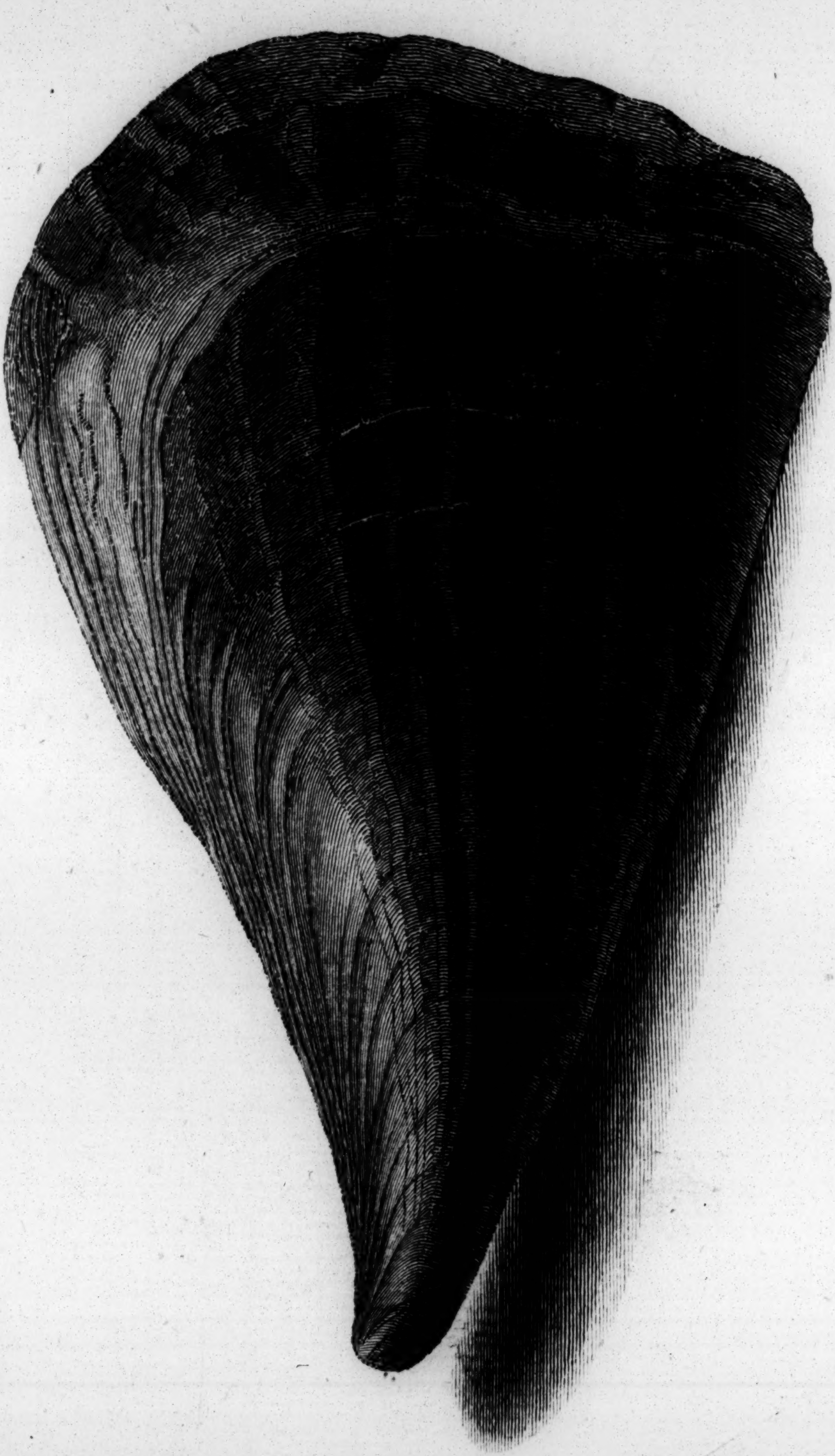


79.

Pl. LXIX

Test.

p.114



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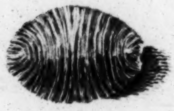
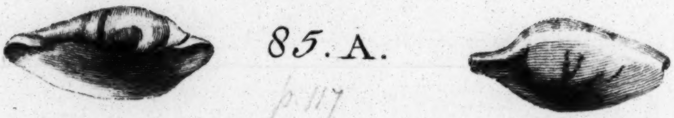
80.

CYPRÆA

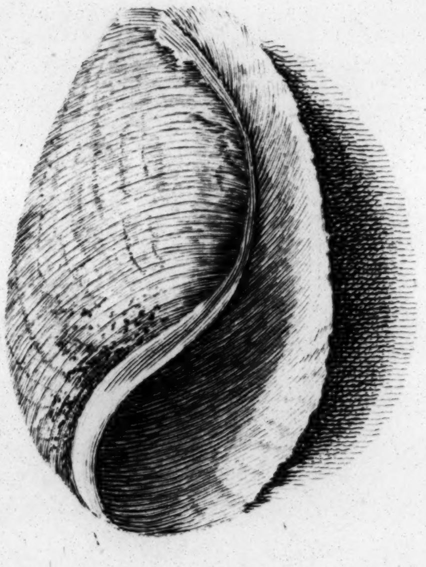


82. p.115



85.A.

p.117



83.

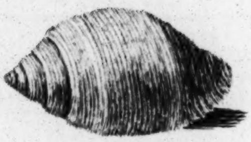
p.116

BULLA

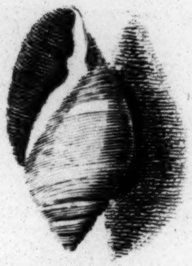
85. p.117

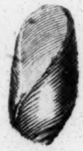
Pl LXXI. Test.

VOLUTA.



86. p 117





87. p 117

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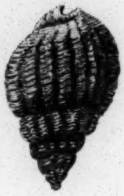
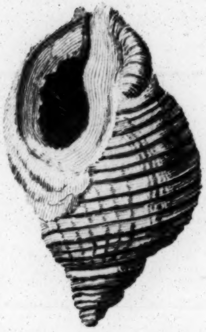


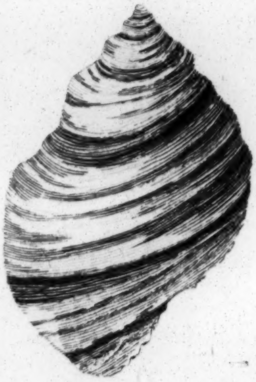
88.

p 118



89.

p 118



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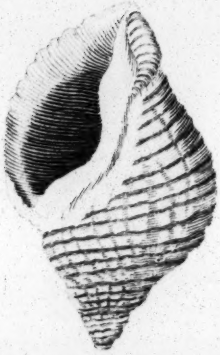
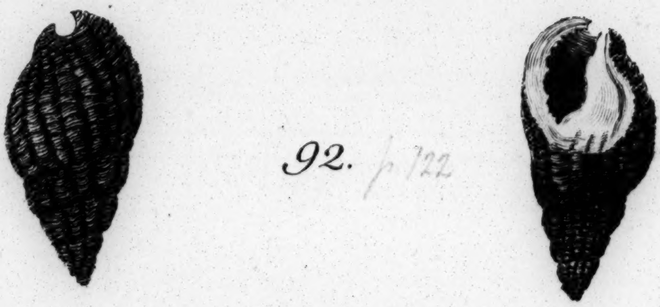
p 118



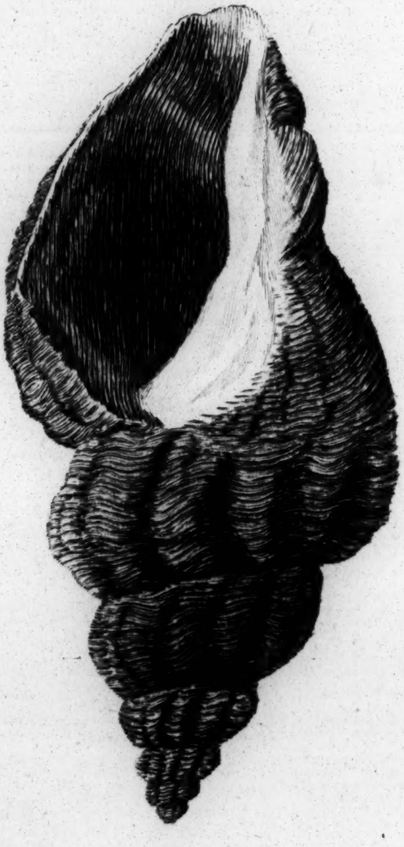
89

p 118



92. p 122

BUCCINUM



90. p.121

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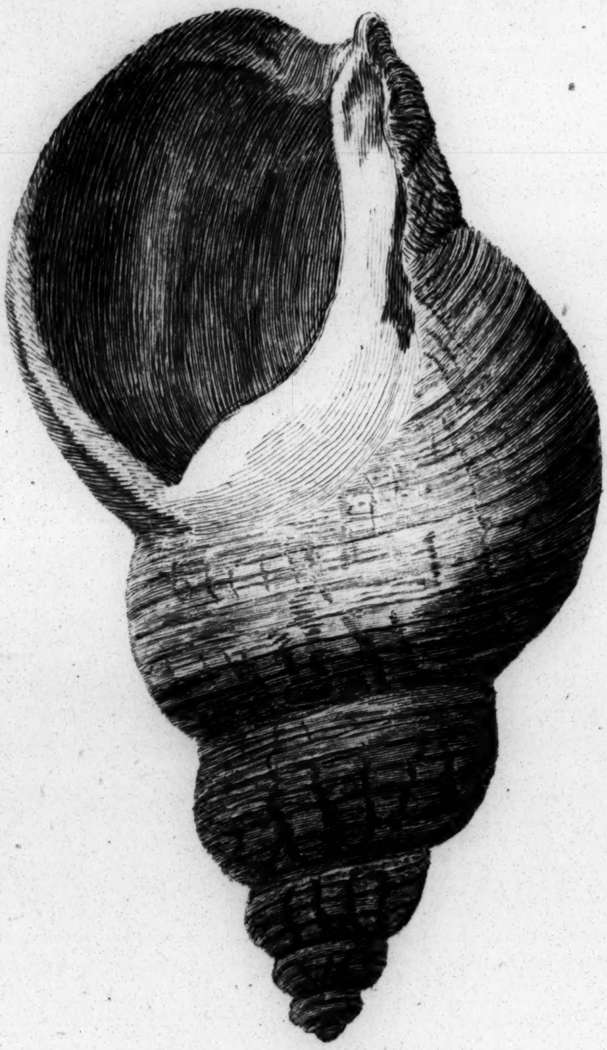
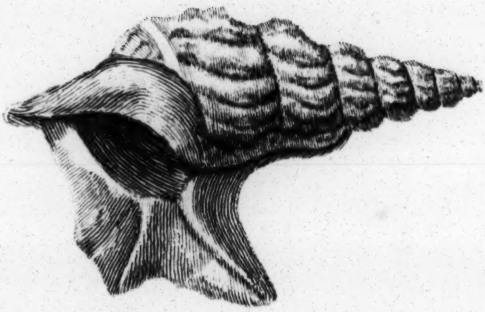
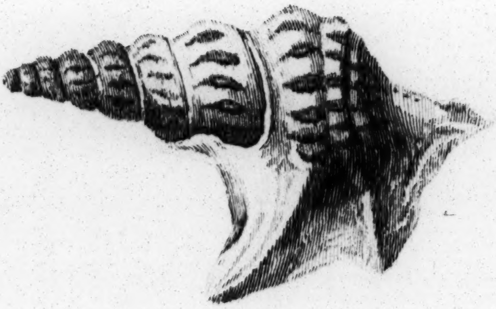


91. p 121

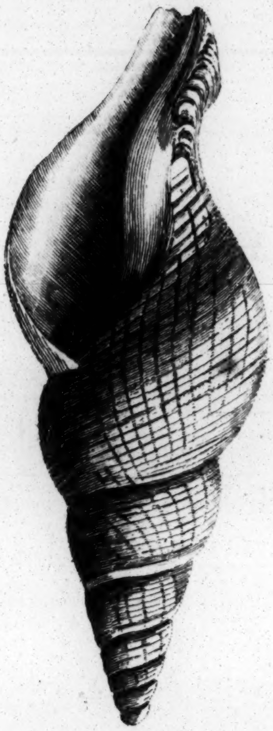
STROMBUS.



94. p 122

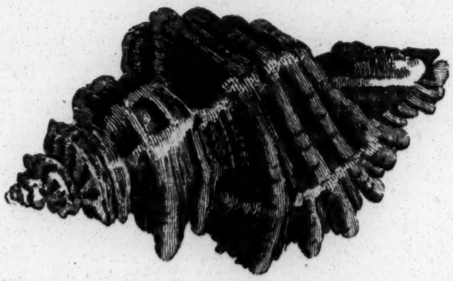


99. p.124



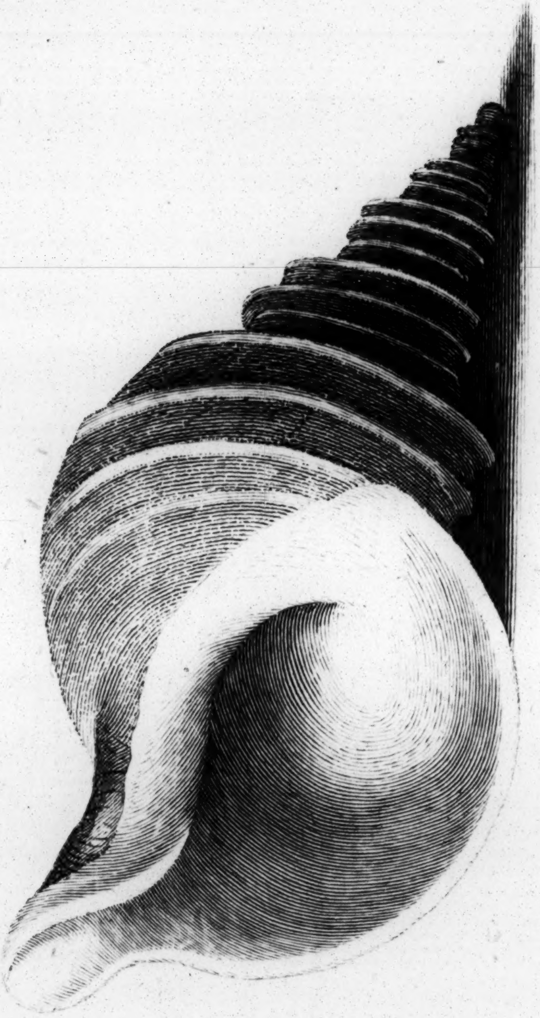
MUREX.

95. p.123



Pl.LXXVII. Test.

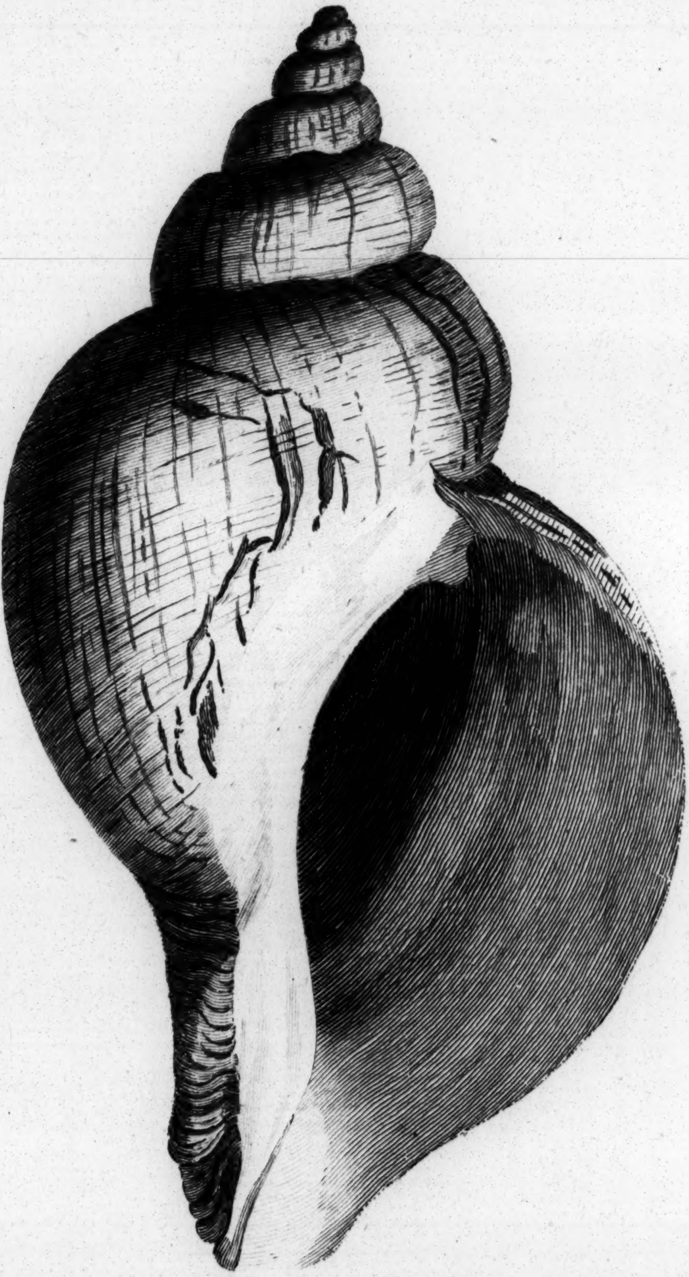
96. p. 123



MUREX.

P

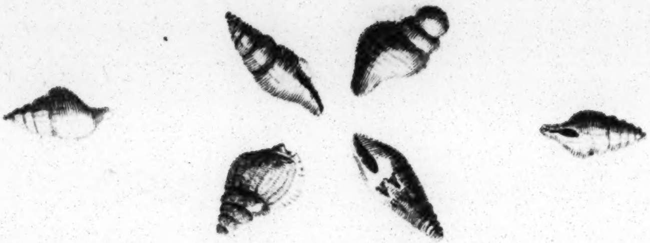
MUREX.



98. p. 124

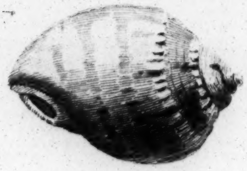
Pl. LXXIX. *Test.*

v. p. 122?



p. 130?

p. 125?



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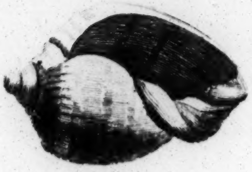
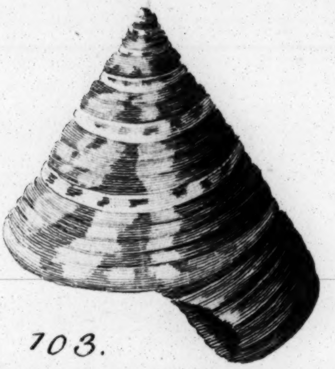


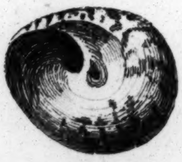
Test

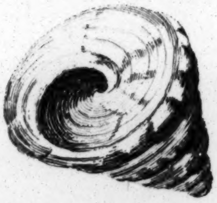
TROCHUS.



103.
p 126

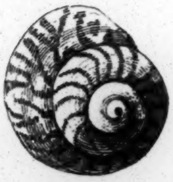
106. p. 126

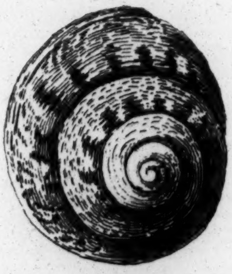




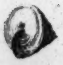
104. p. 126

106. p. 126

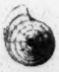




107. p. 127

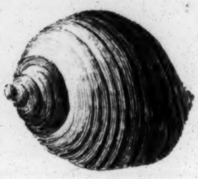


108. p. 127



108. p. 127

HELIX.



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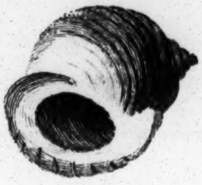
p. 129



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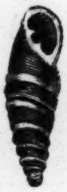
p. 129



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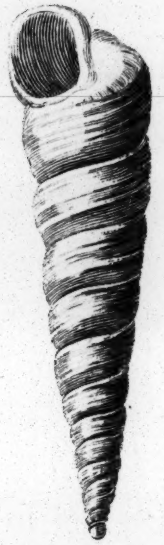
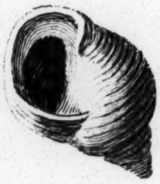
p. 131



113. p. 130



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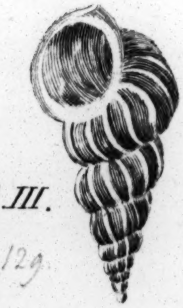

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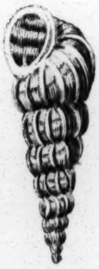
p. 129



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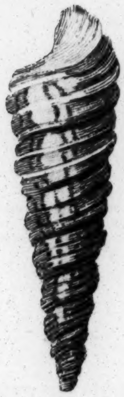


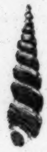
112. p. 129

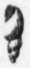
Pl.LXXXII.

Test.

TURBO.

116. p.130





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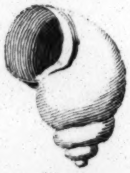

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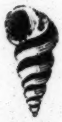

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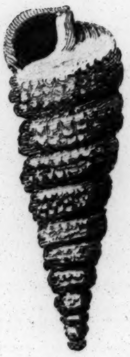

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Pl

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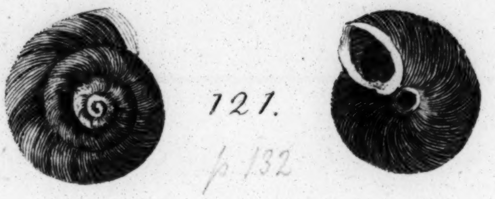
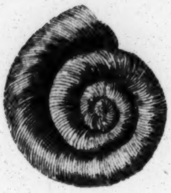


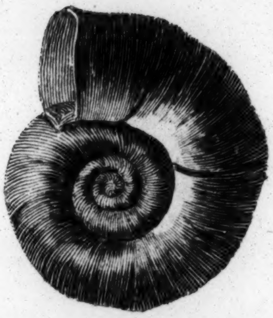
121.

p. 132

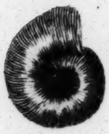


123.

p. 133

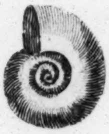


126. p. 134



125.

p. 133



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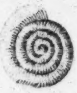
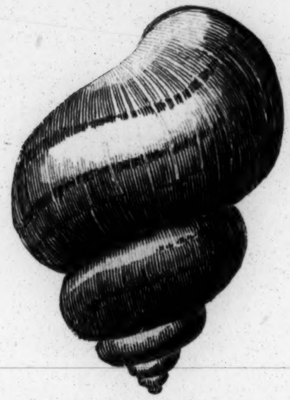


124. p. 133

HELIX.



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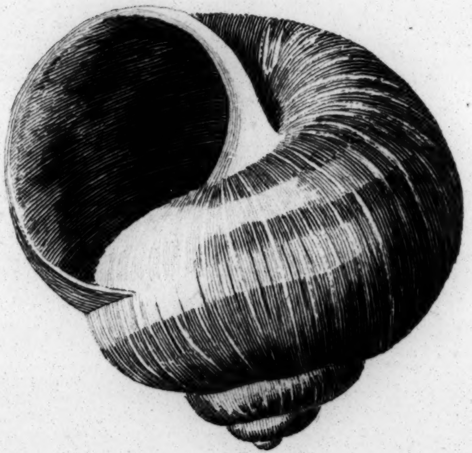

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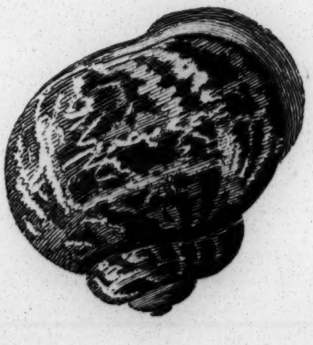
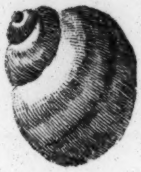
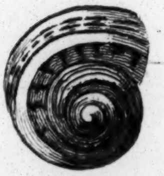


129. p. 136

Pl. LXXXV. Test.

HELIX.





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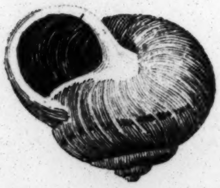

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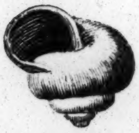

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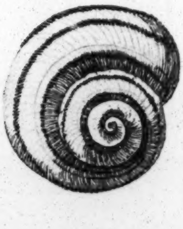
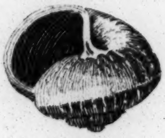


122. p. 132



127. p. 134

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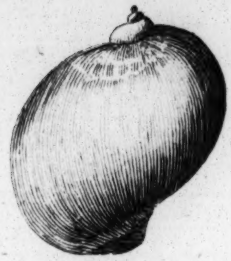

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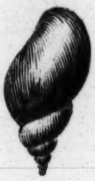
p. 139



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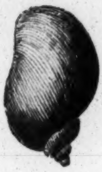

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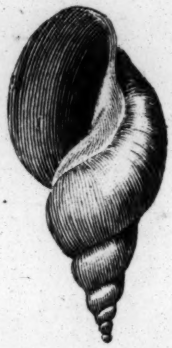
p. 139



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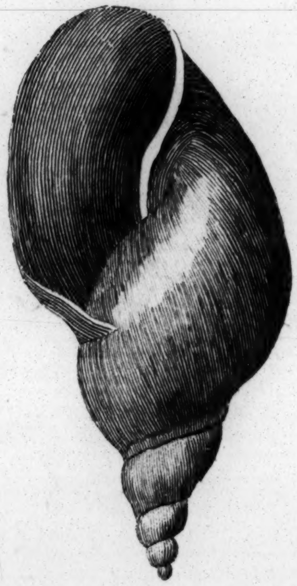

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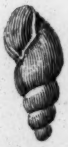

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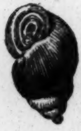
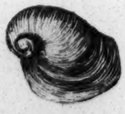


140. p. 140

120. p. 132



139. p. 140

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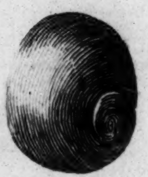

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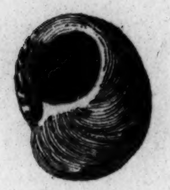
p.141



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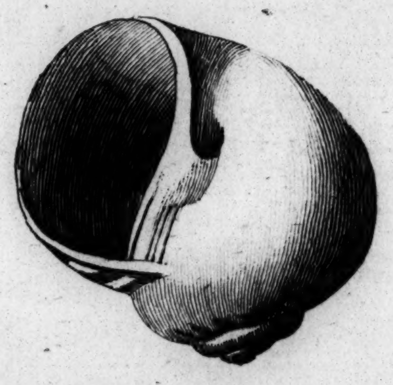
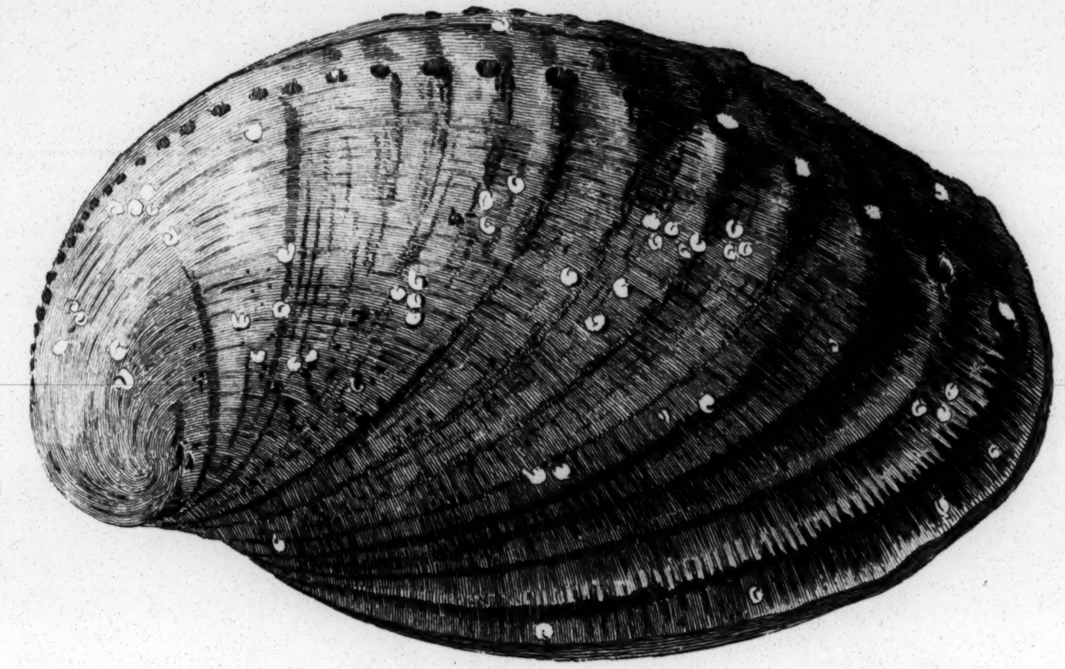
p.141



141.
p.140

142. p.141

Pl. LXXXVIII. Tasſ.



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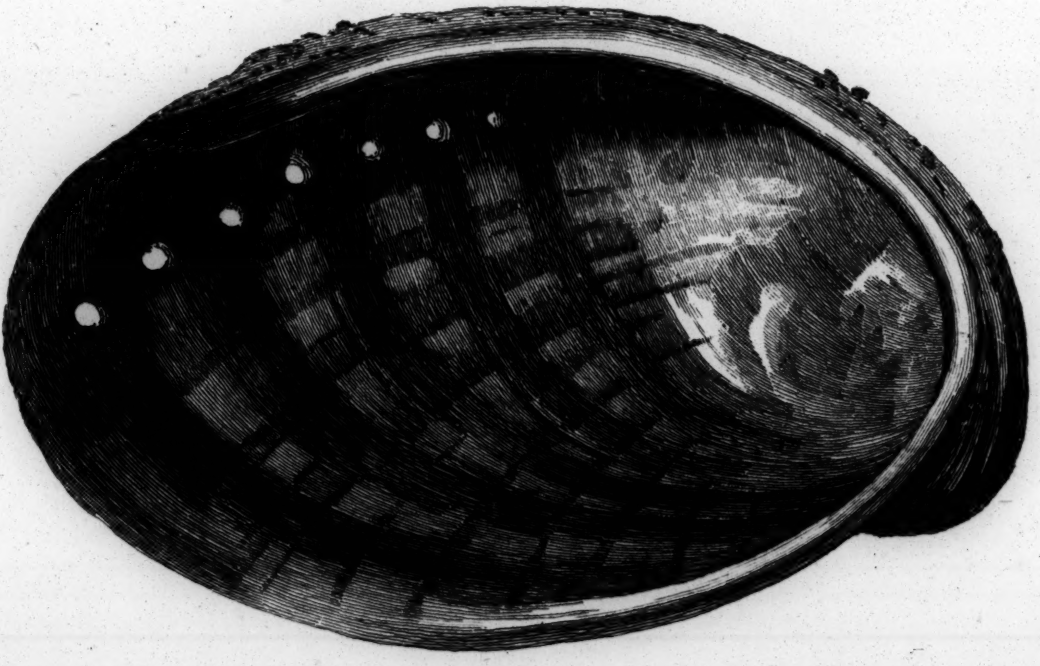
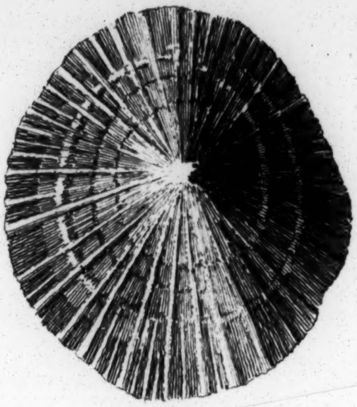
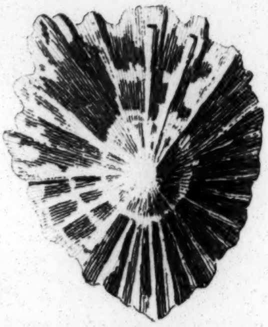


Pl

PATELLA.



145. p 142



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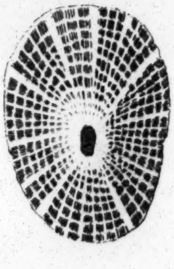
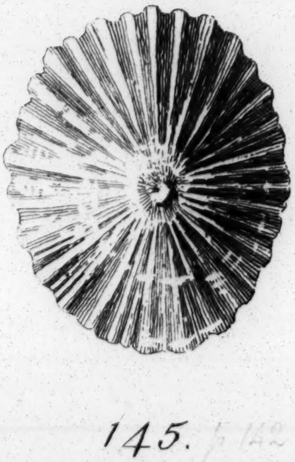


153. p 144



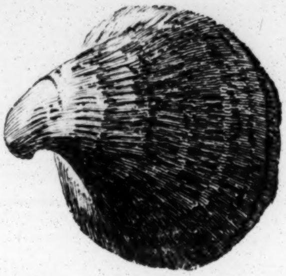
145. p 142

Pl.

Pl.XC.

Test.

PATELLA.



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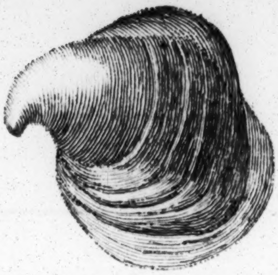

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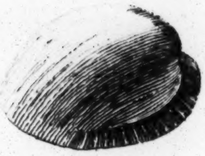
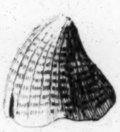
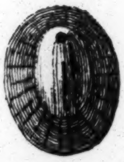


151. p 144



152
p 144



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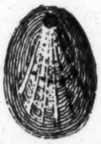

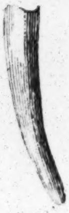

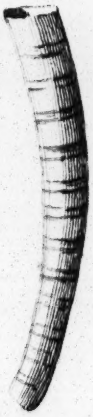

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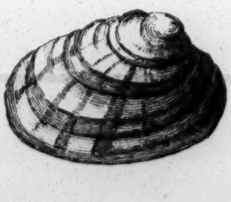

PI

Pl. XCI. Test.

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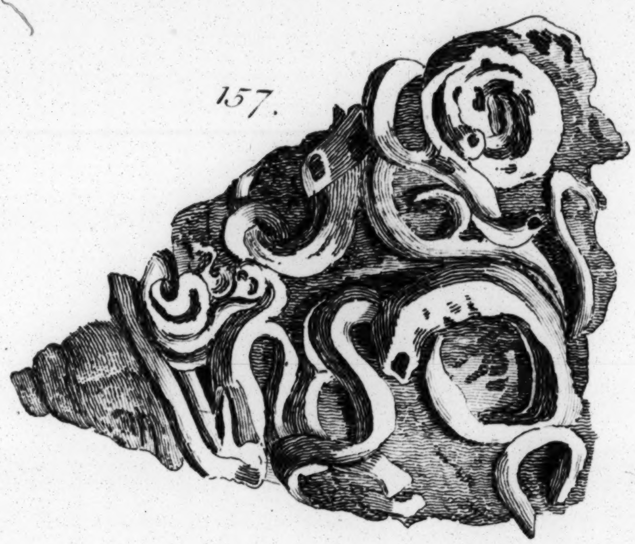
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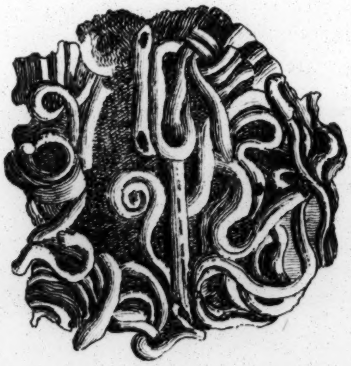
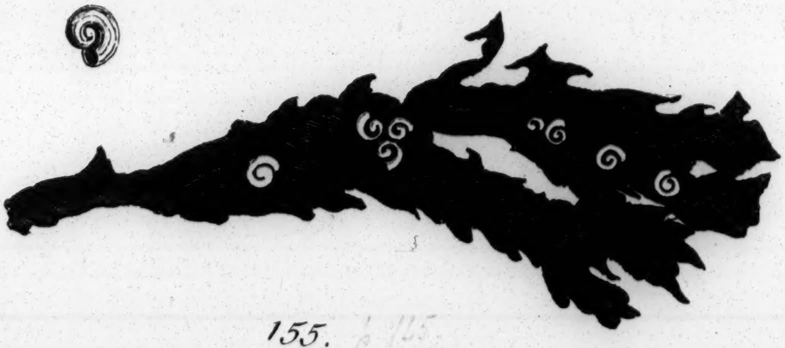

158. p 146

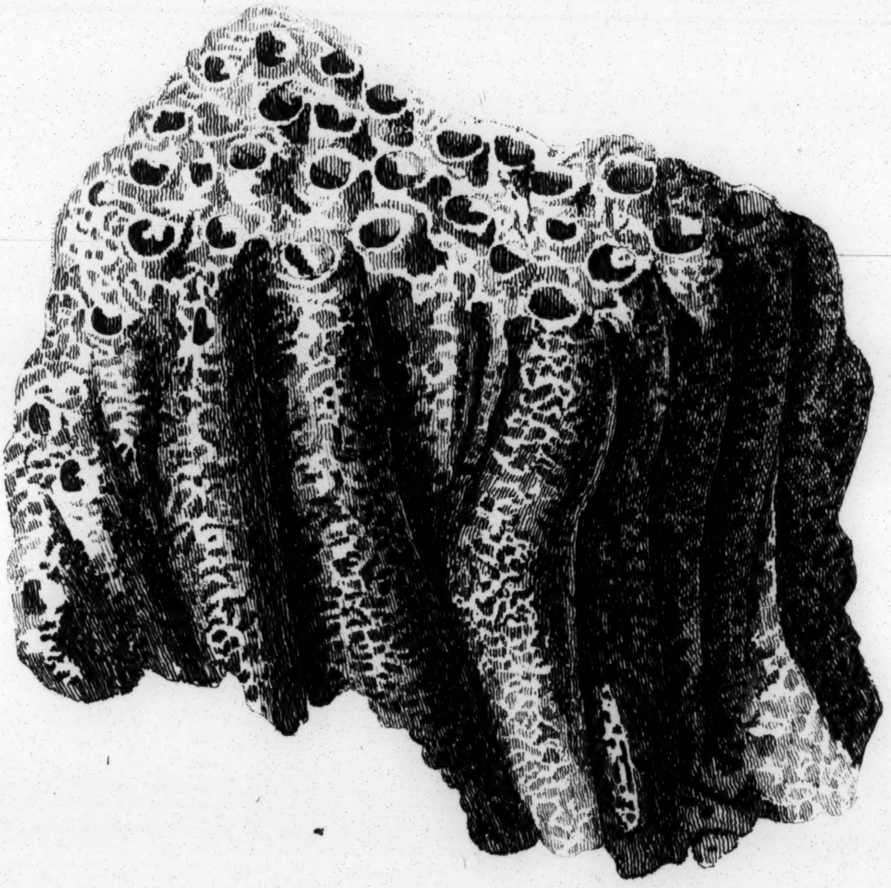

155. p 145

Pl. X

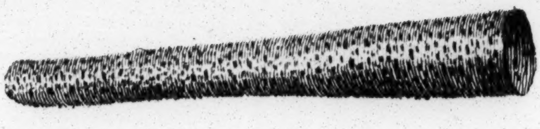
SABELLA.

162.

p.148



163. p.148



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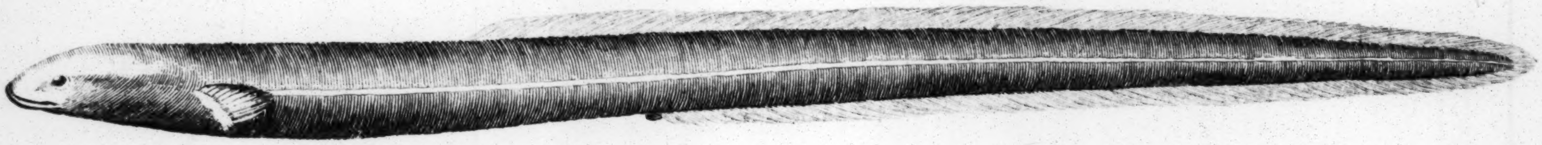

OPHIDIUM. *imberbe.*
BR. ZOOL. III. APPENDIX.

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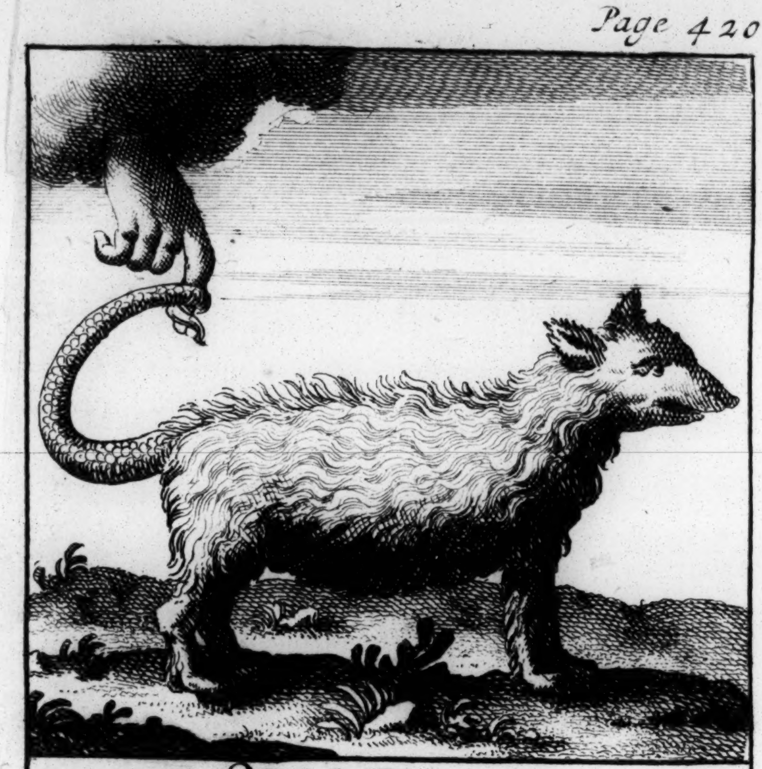
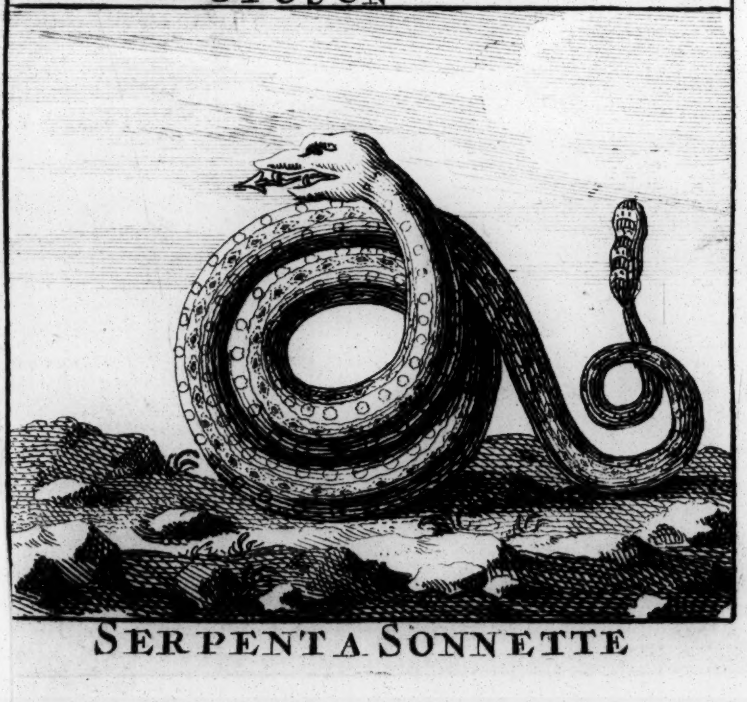


OPOSON



SERPENT A SONNETTE

104
59
107

&c. . . I have bought to day three houſes for thirty thouſand florins, two gardens for ſeven-teen dollars, and eight horſes for three hundred and thirty-eight dollars. I ſhould not have been in circumſtances to buy all this, if I had not won the great prize of an hundred thouſand dollars in the lottery.

Twice,	*zweimal.*
are,	*iſt.*
three times,	*dreimal.*
I have bought,	*ich habe gekauft.*
to day,	*heute.*
for,	*für*, or *um.*
a florin,	*ein Gulden.* 1.
a dollar,	*ein Thaler.*
I ſhould not have been in circumſtances,	*ich wäre nicht im Stande geweſen ſeyn.*
to buy,	*zu kaufen.*
all this,	*all dieſs.*
if,	*wenn.*
I had not won,	*ich nicht — gewonnen hätte.*
The prize,	*das Loos.*
The lottery,	*die Lotterie.* 3.

36.

A man weighing an hundred pounds, has commonly four pounds of brain: no other animal has ſo much. An ox weighing eight or nine quintals has a ſingle pound of brain.. Two hundred and forty-nine bones are rekoned, in the human body; viz: fourteen in the brain, forty-ſix in the other parts of the head and the neck, ſixty-ſeven in the trunk ~~rump~~, ſixty-two in the arms and the hands, and ſixty in the legs and the feet. The bones of the human body make the third part

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of its weight. A full grown man has from twenty to twenty-five pounds of blood, which paſſes from eighteen to twenty times in an hour through his heart.

weighing an hundred,	*von hundert*.
The pound,	*das Pfund*. 2.
has commonly,	*hat gewöhnlich*.
The brain,	*das Gehirn*.
no other,	*kein einziges*.
has ſo much,	*hat ſo viel*.
The ox,	*der Ochs*. 3.
The quintal,	*der Centner*. 1.
a bone,	*ein Knochen*. 1.
a rekoned,	*werden gezählt*, or *man zählt*.
The human body,	*der menſchliche Körper*. 1.
viz,	*nemlich*.
other parts,	*andere Theile*. 2.
The neck,	*der Hals*. 2. *ä*.
The rump,	*der Rumpf*. 2.
The arm,	*der Arm*. 2.
The hand,	*die Hand*. 2. *ä*.
The leg,	*das Bein*, 2.
The foot,	*der Fuſs*. 2. *ü*.
make,	*machen aus*, or *betragen*.
of its,	*ſeiner*.
The weight,	*die Schwere*.
a full grown man,	*ein ausgewachſener Menſch*.
from,	*von*.
to,	*bis*.
The blood,	*das Blut*.
which paſſes,	*das ſtrömet*.
through,	*durch* (Accuſ.).
The heart,	*das Herz*. 3.

37.

Aſtronomers aſſert, that the ſun is a million times greater than the earth; and that a canon ball ſhot from the earth to the ſun, retaining conſtantly its firſt celerity, would be twenty-five years in going thither. Alſo this ball, which went an hundred fathoms

in

10L

Why names both fossile & fish